

PROVINCE.	DIVISION.	RAINFALL DATA FOR WEEK ENDING SEPTEMBER 2ND, 1889.			RAINFALL DATA FROM MAY 13TH TO SEPTEMBER 2ND, 1889.		
		Average Actual Rainfall of Division.	Average Nor- mal Rainfall of Division.	Excess or Defect, in Inches.	Average Actual Rainfall of Season to date.	Average Nor- mal Rainfall, May 13th to September 2nd.	Excess or De- fect of (Season- al) Rainfall expressed as a per- centage.
		Inches.	Inches.	Inches.	Inches.	Inches.	Per cent.
BURMAH . . . . .	Tenasserim . . . . .	9'50	8'36	+ 1'14	155'18	141'89	+ 9
	Lower Burmah . . . . .	4'07	4'43	- 0'36	57'84	71'34	- 19
	Central Burmah . . . . .	4'32	3'71	+ 0'61	45'71	58'41	- 22
	Upper Burmah . . . . .	2'12	?	?	43'72	?	?
	Arakan . . . . .	8'18	5'73	+ 2'45	146'97	150'51	- 2
BENGAL AND ASSAM . . . . .	Eastern Bengal . . . . .	4'26	3'53	+ 0'73	55'26	63'46	- 13
	Assam (Surma) . . . . .	8'47	3'82	+ 4'65	96'42	74'48	+ 29
	Do. (Brahmaputra) . . . . .	5'68	3'02	+ 2'66	63'83	54'05	+ 17
	Deltaic Bengal . . . . .	2'45	2'18	+ 0'27	36'18	39'78	- 9
	Central Bengal . . . . .	3'05	2'29	+ 0'76	37'22	38'72	- 4
	North Bengal . . . . .	7'87	4'57	+ 3'30	82'09	72'65	+ 12
	Orissa . . . . .	1'86	1'98	- 0'12	36'80	35'41	+ 4
	Chota Nagpur . . . . .	2'99	2'11	+ 0'88	36'14	36'19	0
	Behar (South) . . . . .	4'32	1'87	+ 2'45	32'67	30'66	+ 7
	Do. (North) . . . . .	3'71	2'76	+ 0'95	38'41	34'54	+ 11
NORTH - WESTERN PROVINCES AND OUDH. . . . .	North - Western Provinces (East). . . . .	6'96	1'88	+ 5'08	36'16	26'02	+ 39
	Oudh (South) . . . . .	6'90	1'87	+ 5'03	35'99	26'26	+ 38
	Do. (North) . . . . .	6'78	1'90	+ 4'88	37'43	28'77	+ 30
	North - Western Provinces (Central). . . . .	4'30	1'59	+ 2'71	24'33	22'95	+ 5
	North - Western Provinces (West). . . . .	1'30	1'72	- 0'42	21'10	21'42	- 1
	North - Western Provinces (Submontane). . . . .	4'73	2'45	+ 2'28	45'22	32'93	+ 37
PUNJAB . . . . .	Punjab (South) . . . . .	0'76	0'69	+ 0'07	11'29	10'70	+ 6
	Do. (Central) . . . . .	2'62	1'36	+ 1'26	16'58	17'04	- 6
	Do. (Submontane) . . . . .	1'27	1'32	- 0'05	20'00	21'07	- 5
	Do. (Hill Districts) . . . . .	1'72	4'64	- 2'92	57'87	68'77	- 16
	Do. (North-West) . . . . .	1'28	0'81	+ 0'47	15'66	15'96	- 2
	Do. (West) . . . . .	0'78	0'21	+ 0'57	6'65	5'75	+ 16
BOMBAY AND MALA- BAR COAST DIS- TRICTS (MADRAS). . . . .	Malabar . . . . .	1'68	3'06	- 1'38	87'17	88'32	- 1
	Madras (South Central) . . . . .	2'21	0'88	+ 1'33	24'33	11'49	+ 112
	Coorg . . . . .	4'27	4'22	+ 0'05	80'73	81'37	- 1
	Mysore . . . . .	2'43	1'11	+ 1'32	11'73	14'86	- 21
	Konkan . . . . .	2'17	4'44	- 2'27	109'08	82'55	+ 32
	Bombay Deccan . . . . .	0'39	1'54	- 1'15	18'04	22'09	- 20
	Hyderabad (North) . . . . .	...	...	...	...	...	...
	Khandeish . . . . .	0'48	1'36	- 0'88	12'17	16'64	- 27
CENTRAL PROVINCES AND BERAR. . . . .	Berar . . . . .	1'21	2'50	- 1'29	28'93	25'10	+ 15
	Central Provinces (West) . . . . .	1'54	2'24	- 0'70	29'91	30'53	- 2
	Ditto (Central) . . . . .	2'25	2'66	- 0'41	45'56	40'40	+ 13
	Ditto (East) . . . . .	1'24	2'09	- 0'85	43'10	36'91	+ 17
BOMBAY (NORTH) . . . . .	Guzerat . . . . .	2'50	3'08	- 0'58	32'06	30'24	+ 6
	Kattiawar . . . . .	0'36	1'82	- 1'46	23'38	21'97	+ 6
	Sind . . . . .	0	0'25	- 0'25	1'48	3'89	- 62
RAJPUTANA AND CEN- TRAL INDIA. . . . .	Central India (East) . . . . .	2'19	2'10	+ 0'09	35'24	28'52	+ 24
	Rajputana (East), Central India (West). . . . .	1'66	2'25	- 0'59	28'36	20'93	+ 36
	Rajputana (West) . . . . .	0'03	1'02	- 0'99	8'39	10'30	- 19
MADRAS . . . . .	East Coast (North) . . . . .	2'05	1'52	+ 0'53	23'26	18'20	+ 28
	East Coast (North) (a) . . . . .	1'00	1'73	- 0'73	25'15	27'15	- 7
	Hyderabad (South) . . . . .	1'30	1'58	- 0'28	10'86	16'10	+ 4
	Madras (Central) . . . . .	1'31	1'10	+ 0'21	13'13	12'26	+ 7
	East Coast (Central) . . . . .	0'92	1'13	- 0'21	13'26	13'44	- 1
	Ditto (South) . . . . .	1'06	1'13	- 0'07	13'69	10'61	+ 29
	Madras (South) . . . . .	1'54	0'80	+ 0'74	5'87	5'83	+ 1

W. L. DALLAS,

SIMLA, 5th September, 1889.

Assistant Meteorological Reporter to the  
Government of India.

E. C. BUCK,

Secretary to the Government of India.

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## GOVERNMENT OF INDIA.

## REVENUE AND AGRICULTURAL DEPARTMENT.

## Weekly Report on the State of the Season and Prospects of the Crops.

**Madras.**—*For week ending 30th August.*—Rainfall general and good in most districts. Crops generally good, but withering in parts of Bellary, Anantapur, South Arcot, and Coimbatore. More rain wanted in parts of these districts and Cuddapah, Trichinopoly, and Tinnevely. Crops damaged by insects in Anantapur, Tinnevely, and Salem. Prices rising in ten districts, falling in seven, and stationary in the rest. Labourers employed on last day of week,—on Rushikulya works, 4,174; Gopalpur Canal, 1,330; Ghat Roads, 3,942; other minor works, 2,017. Number on village relief on 24th August, 52,559, including 31,057 children; fed in kitchens, 11,023, including 7,726 children. Imports during week by sea and land, 655 tons. General prospects favourable everywhere. Season very favourable in Ganjam.

**Bombay.**—*For week ending 4th September.*—Rain during week general; total fall insufficient in parts of Surat, Khandesh, Nasik, Poona, Ahmednagar, Sholapur, Satara, Bijapur, Belgaum, and Dharwar. Young crops damaged by floods in parts of Karachi, by blight in parts of Upper Sind Frontier, by grasshoppers in parts of Ahmedabad, and by excessive rain in parts of Kaira; also withering for want of moisture in parts of Nasik, Poona, Ahmednagar, Satara, Belgaum, and Dharwar. Standing crops otherwise good, except in two talukas of Khandesh. Sowing retarded for want of sufficient rain in parts of Poona, Bijapur, and Belgaum. Preparations for late crops progressing in Karachi and Hyderabad. Fodder scarce in parts of Nasik, Poona, Ahmednagar, Satara, Belgaum, and Dharwar. Drinking-water scarce in parts of Upper Sind Frontier, Nasik, Ahmednagar, and Dharwar. Prices rising in two talukas of Nasik.

**Bengal.**—*For week ending 3rd September.*—Ordinary monsoon weather has been prevalent throughout the week, and there has been general rain over the whole Province. The rain was rather heavy in parts of North and East Bengal and Behar. Transplanting of winter rice is being rapidly completed, but more rain is still wanted in places in Western Bengal, South Bhagalpur, the Sonthal Pergunnahs, the Sadr sub-division of Balasore, and the Palamow sub-division of Lohardagga. Early rice and jute harvests are in progress. Outturn of early rice reported to be full average in Backergunge; not much short of average in Rajshahye and Jalpaiguri; and only 9 annas in Pubna and Dacca. In Pubna the quality of jute is said to have been impaired by excessive water. In Behar and Chota Nagpur the *bhadoi* crops are promising, except on the inundated tracts. In Behar some of these crops have begun to be harvested. Food-stocks are reported sufficient in all the affected areas of the Province. In Muzaffarpur the floods are subsiding, but applications for gratuitous relief are increasing. In Chumparun agricultural loans are being distributed, and 1,900 people are in receipt of Government and private charity. Charitable relief is also being given to 177 persons in the Contai sub-division of Midnapur, where the affected area is about 110 square miles. In the north of Bhagalpur the attendance on two relief works has increased from 341 to 402.

**North-Western Provinces and Oudh.**—*For week ending 4th September.*—The rainfall has been generally heavy throughout the Provinces. Crops have suffered in several places from excessive rain and from overflow of rivers. Prospects are however favourable. Harvesting operations have commenced in a few districts. Markets are well supplied, and prices are on the whole steady.

**Punjab.**—*For week ending 4th September.*—Rain has fallen in all districts, except Mooltan and Peshawar. Prices are falling in Delhi, Mooltan, and Shahpur; rising in Rawalpindi; and stationary elsewhere. Sowings of *kharif* crops almost completed. Ploughings for *rabi* in progress. Prospects of *rabi*

crops are generally good and promising. Stock cattle are reported healthy. Pasturage or fodder sufficient throughout the Province.

**Central Provinces.**—*For week ending 4th September.*—*Kharif* crops suffered to some extent in Saugor from excessive moisture; but there is now a seasonable break in the weather all over the Provinces, and the prospects of the crops are very favourable. The ground is being prepared for *rabi* sowings. Prices continue steady.

**Burma.**—*For week ending 31st August.*—In Lower Burma the rainfall was heavy in most districts. Some paddy has been destroyed by floods in Bassein and a little in Thongwa; otherwise the crops promise well, though backward in Tharrawaddy and Prome. In Upper Burma there was fair rainfall in Bhamo, Ruby Mines, Sagaing, Kyaukse, Upper Chindwin, Myingyan, and Pyinmana. In the other districts the rainfall was slight, or there was none. Rain is wanted in parts of Shwebo, Pokokku, Meiktila, and Yamethin; except in these districts and in Bhamo, the crops generally promise well. The prices of paddy rose 5 per cent. in Thongwa, 14 per cent. in Shwebo, and fell 10 per cent. in Tharrawaddy and 9 per cent. in Prome. There were no other fluctuations of consequence.

**Assam.**—*For week ending 4th September.*—Weather seasonable. Rainfall excessive in Nowgong, and moderate elsewhere. Reaping of early and transplanting of winter rice continue. Tea doing well; blight is prevalent in Cachar.

**Mysore and Coorg.**—*For week ending 4th September.*—Rainfall good throughout the State of Mysore, except in parts of Tumkur, where rain is needed. Standing crops in good condition. No material change in prices.

Good rain in Coorg. South-west monsoon has closed. Prospects good.

**Berar and Hyderabad.**—*For week ending 4th September.*—Average rainfall fair in Berar. Weeding continues. *Kharif* in good condition. Preparation of fields for *rabi* commenced. Cattle healthy. Fodder sufficient. Prices unchanged.

Fair rain during the week in Hyderabad. *Kharif* crops prospering. Weeding of *abi* crops continues. Water in tanks not yet sufficient for *tabi* crops. Prices stationary.

**Central India.**—*For week ending 4th September.*—Rain throughout Central India during the week. Prospects of crops and pasturage in Goona improved. No change in Neemuch and Bhopal. Bhopawar reports crops slightly damaged by rain. Locusts have appeared in parts of Jhabua and Burwani in Bhopawar. Prices of foodgrains high in Western Malwa and slightly fallen in Bhopawar.

**Rajputana.**—*For week ending 4th September.*—Heavy rain in Kerowlee, slight in Meywar and Sirohi, and moderate elsewhere. Agricultural operations satisfactory. Hope of good harvests. Damage reported by locusts in Marwar; by insects in Meywar; and by heavy rain in Jhallawar, Harowtee, and Kerowlee. Agricultural stock good. Pasturage or fodder sufficient. Prices steady.

**Nepal.**—*For week ending 29th August.*—Seasonable rain. Prospects of crops good.

E. C. BUCK,  
Secretary to the Government of India.

GOVERNMENT OF INDIA.  
PUBLIC WORKS DEPARTMENT.  
RAILWAY TRAFFIC.

No. XIX. OF 1889-90.

APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used as far as possible.

No. 5.—As regards the railways in connection with the Indian Railways.													
Latest Return received.	RAILWAYS.	WEEK ENDING 11TH AUGUST, 1888.			WEEK ENDING 10TH AUGUST, 1889.			TOTAL RECEIPTS FROM 1ST APRIL TO 11TH AUGUST, 1888.		TOTAL RECEIPTS FROM 1ST APRIL TO 10TH AUGUST, 1889.		Total increase in 1889-90.	Total decrease in 1889-90.
		Total mean length open.	Receipts.		Total mean length open.	Receipts.		Total.	Per mile open per week.	Total.	Per mile open per week.		
			Total.	Per mile open.		Total.	Per mile open.						
			Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
State Lines worked by Companies.													
24th August, 1889	East Indian	1,514	6,32,820	418	1,514	6,80,326	450	1,59,40,351	554	1,63,52,141	569	4,11,590	...
24th ditto	Patna-Gya	57	8,729	153	57	7,418	130	1,56,886	144	1,61,731	149	4,845	...
24th ditto	Dildarnagar-Ghazipur	12	623	52	12	662	55	19,097	86	17,791	78	...	1,906
.....	Sindia	75	4,231	56	...	(a)	...	1,45,061	102	(a)	...	...	1,45,061
17th August, 1889	Rajputana-Malwa	1,664	2,12,899	128	1,664	2,77,000	166	67,36,887	213	76,90,678	245	9,53,791	...
17th ditto	Bengal-Nagpur (b)	186	14,896	80	305	(c) 18,465	61	6,24,373	177	(c) 7,14,374	127	90,001	...
17th ditto	Southern Mahratta (d)	850	66,985	79	857	61,111	71	14,87,307	92	15,95,917	98	1,08,610	...
17th ditto	Do. Mysore Section	140	11,165	80	219	13,850	63	1,96,615	94	2,60,953	63	64,338	...
17th ditto	Indian Midland	136	9,591	70	746	(e) 44,096	59	2,38,665	112	(e) 10,67,175	89	7,78,510	...
10th ditto	Villupuram-Dharmavaram (Nellore Branch)	83	3,978	48	83	4,603	55	92,118	58	91,389	58	...	729
17th ditto	Bareilly-Pilibhit	36	1,142	32	36	1,410	39	29,317	45	37,031	57	7,714	...
	TOTAL	4,753	9,67,059	203	5,493	11,08,941	202	2,57,17,477	285	2,79,89,180	276	22,71,703	...
State Lines worked by Government.													
24th August, 1889	North Western (f)	2,411	4,01,125	166	2,386	4,47,470	188	87,67,473	191	99,93,013	222	12,25,540	...
17th ditto	Oudh and Rohilkhand	692	90,836	131	692	1,05,902	153	26,86,344	204	30,15,071	229	3,28,727	...
17th ditto	Bengal Central	125	9,818	79	125	14,440	115	2,22,611	94	2,58,914	109	36,303	...
17th ditto	Wardha Coal	45	11,710	260	45	13,870	308	2,71,068	317	3,03,424	358	32,356	...
17th ditto	Eastern Bengal	673	2,13,241	317	747	2,20,090	295	29,12,097	228	31,42,934	238	2,30,837	...
24th ditto	Nalhati	27	1,604	59	27	1,160	53	36,041	73	35,193	72	...	848
24th ditto	Tirhoot	259	20,018	77	273	35,952	132	6,43,470	138	7,15,247	146	71,777	...
17th ditto	Lucknow-Sitapur-Sihramau	105	3,860	37	105	5,765	55	97,397	49	1,28,175	64	30,868	...
17th ditto	Jorhat	25	1,554	62	25	1,471	58	21,375	40	22,278	41	903	...
10th ditto	Cherra-Companyganj	7	124	17	7	176	23	1,298	9	2,088	15	790	...
10th ditto	Burma (g)	392	41,351	105	553	67,597	122	11,03,839	153	17,10,311	165	6,12,472	...
	TOTAL	4,761	7,95,241	167	4,985	9,14,193	183	1,67,62,923	186	1,93,32,648	208	25,69,725	...
Lines worked by Guaranteed Companies.													
17th August, 1889	Madras	840	1,56,126	186	840	1,68,931	201	31,14,180	195	34,33,057	217	3,18,877	...
10th ditto	South Indian	654	96,448	147	654	1,01,541	155	20,56,455	165	21,60,912	176	1,10,457	...
17th ditto	Great Indian Peninsula	1,497	(h) 5,19,644	347	1,440	(i) 3,55,234	247	1,68,77,399	592	1,30,11,455	478	...	38,65,944
17th ditto	Bombay, Baroda and Central India (j)	461	1,42,231	309	461	1,71,000	371	47,94,169	547	51,06,207	587	3,12,098	...
	TOTAL	3,452	9,14,449	265	3,395	7,96,706	235	2,68,42,203	409	2,37,17,691	370	...	3,24,512
GRAND TOTAL (GUARANTEED AND STATE)													
		12,960	26,76,749	206	13,873	28,19,840	203	6,93,22,603	282	7,10,39,519	274	17,16,916	...
GROSS ESTIMATED EXPENSES													
		...	...	...	...	...	...	3,58,71,889	146	3,66,29,168	141	7,57,279	...
NET RECEIPTS													
		...	...	...	...	...	...	3,34,50,714	136	3,44,10,351	133	9,59,637	...
Assisted Companies.													
24th August, 1889	Tarakshwar	22	3,996	182	22	4,959	225	1,12,063	265	1,12,435	266	372	...
3rd ditto	Dibru-Sadiya	...	...	...	...	(k)	...	(l) 1,54,296	110	(m) 1,74,234	124	19,938	...
24th ditto	Bengal and North-Western	376	34,652	92	376	38,470	102	9,76,278	137	10,29,411	145	53,133	...
10th ditto	Rohilkhand-Kumaun	67	5,047	75	67	5,589	83	1,41,383	117	1,45,110	120	3,527	...
	TOTAL	465	43,695	94	465	49,018	105	13,84,220	134	14,61,190	143	76,970	...
Native States.													
17th August, 1889	His Highness the Nizam's Guaranteed Company	310	27,763	89	354	43,851	124	5,75,379	109	7,80,096	117	2,04,517	...
17th ditto	His Highness the Gaekwar's	59	1,239	21	59	1,640	28	53,042	47	51,479	46	...	1,763
17th ditto	His Highness the Gaekwar's Veramgam-Mehsana-Vadnagar	21	703	33	27	700	26	18,382	46	22,257	44	3,875	...
17th ditto	Bhavnagar-Gondal-Junagarh-Forbandar	193	12,173	63	260	16,000	62	3,93,054	107	5,41,183	110	1,48,129	...
17th ditto	Morvi	68	2,106	32	68	2,326	34	74,808	58	83,141	64	8,273	...
17th ditto	Jodhpore	124	4,096	33	124	5,200	42	1,44,211	61	1,32,491	57	...	11,720
	TOTAL	775	48,140	62	892	69,717	78	12,59,136	89	16,10,447	96	3,51,311	...

(a) Included with the Indian Midland Railway.

(b) Includes the Katni-Umaria Branch.

(c) Includes the Sanctoria Coal Section of the Bengal-Nagpur Railway.

(d) Includes the Bellary-Kistna State Railway.

(e) Includes the Sindia and Bhopal-Itarsi State Railways.

(f) Includes the Amritsar-Patliankot and Rajpura-Bhatinda State Railways.

(g) Includes the Toungoo-Mandalay extension.

(h) Includes the Dhond-Manmad, Khámgaon, Amráoti, and Bhopal-Itarsi State Railways.

(i) Includes the Dhond-Manmad, Khámgaon, and Amráoti State Railways.

(j) Includes the Patri Branch.

(k) Return not received.

(l) Total receipts from 1st April to 4th August, 1888.

(m) Total receipts from 1st April to 3rd August, 1889.

M. C. BRACKENBURY, Major, R.E.,

Under Secretary

SIMLA, 5th September, 1889.



SUPPLEMENT TO  
**The Gazette of India.**

No. 37.]

SIMLA, SATURDAY, SEPTEMBER 14, 1889.

**OFFICIAL PAPERS.**

*A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor-General will in future be published in PART VI. of the GAZETTE.*

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GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

**Weather Review of India for the week ending at 8 a.m. on  
Monday, September 9th, 1889.**

In the previous summary the gradual steady fall in the force and extent of the Arabian Sea monsoon current was noticed, and the commencement of a similar change in the case of the Bengal current was reported. These conditions have continued during the past week, throughout which period the Arabian Sea branch of the monsoon has been practically absent and the Bengal current feeble, intermittent, and variable.

The Chart of the 3rd of September showed an area of very low pressure over the Indus Valley and of relatively low pressure over the Gangetic plain, with high pressures over the Andaman Sea and Lower Burma and relatively high pressures over the south of the Peninsula. Moderate gradients existed over Sind, Guzerat, and Rajputana, and a moderately strong westerly current of air blew across those districts and into the central parts of the country. Elsewhere the winds were light and generally variable—more particularly on the West Coast. On the 4th the general distribution was unaltered, but the low pressure area over the Indus Valley had largely filled up. Readings were very uniform over the Peninsula, and calms and northerly breezes prevailed there. The Chart of the 5th showed a redevelopment of the low pressure over the extreme north-west and to a considerable extent a reproduction of the pressure distribution which prevailed on the 3rd. A general westerly current of air, light or moderate in force, swept across Northern and Central India, while northerly to north-westerly breezes and calms were reported from the Peninsula. South-westerly winds were blowing across the Bengal Coast, and an imperfect cyclonic circulation prevailed in Lower Burma. On the 6th the barometer was falling generally, but the change was fairly uniform and the distribution not materially altered. The westerly winds over Northern India had fallen

off in strength, but there was little other change. The chart of the 7th showed that pressure continued to decrease generally. A small shallow disturbance, with a cyclonic circulation of the winds, had passed into West Bengal from the Bay, and a well defined low pressure area was shown over the north-west of the Punjab, but the most prominent feature of the distribution was an elongated anti-cyclone lying over the centre of the Peninsula, extending from Malegaon to Cochin. A slight extension of easterly winds into the eastern districts of the North-Western Provinces was shown and also a further decrease in the westerly winds over Northern India, but otherwise there was very little change. By the morning of the 8th the small depression over South-West Bengal had disappeared, but the chart showed little other change. The chart of the 9th also showed very little alteration in pressure, but the winds had become moderate in force and normal in direction at the head of the Bay. Calms and variable winds prevailed in Northern India and light northerly to north-westerly winds over the Peninsula.

*Temperature.*—The generally cool weather, which prevailed over India during the week ending September 2nd, continued during the first two days of the week under review, but with the decreasing rainfall temperature rose, and the general temperature during the remaining five days of the week was above the normal average. The net results for the week exhibit an excess of temperature in the Provinces of Burma, the North-Western Provinces, the Punjab, Bombay, and the Central Provinces, and a deficiency in Bengal, Guzerat, Central India, Sind, Rajputana, and Madras. The excess in Bombay equals nearly  $2^{\circ}$ , in the Punjab  $1\frac{1}{2}^{\circ}$ , and in the Central Provinces  $1^{\circ}$ , while the deficiencies on the contrary were almost everywhere small. The warmest day was the 8th, when the only Provinces reporting a deficient temperature were Bengal and Guzerat and Central India; the coolest day was the 3rd, when the only places reporting any excess were Bombay and the Central Provinces.

During the week the maxima in the Indus Valley have steadily exceeded  $100^{\circ}$ , on one occasion by as much as  $5^{\circ}$ , and during the latter half of the week these high maxima have extended over the greater part of the Punjab also. The following table shows the amount of the excess or defect of the mean average temperature of the different Provinces for the present and for the preceding week:

PROVINCES.	Difference of Mean Temperature of Last Week from Normal.	Difference of Mean Temperature of present Week from Normal.
Burmah . . . . .	— 0.6	+ 0.7
Bengal . . . . .	— 0.1	— 0.6
North-Western Provinces . . . . .	— 0.7	+ 0.1
Punjab . . . . .	— 1.4	+ 1.6
Bombay . . . . .	+ 1.2	+ 1.9
Central Provinces and Berar . . . . .	— 0.3	+ 1.0
Guzerat and Central India . . . . .	0	— 0.1
Sind and Rajputana . . . . .	+ 0.2	— 0.3
Madras . . . . .	+ 0.5	— 0.4

This table shows that, compared with the average, the weather has been warmer in all Provinces, except Sind and Rajputana, Bengal and Madras.

*Rain.*—A weak and irregular monsoon on the Bay of Bengal side and an almost entire absence of monsoon winds on the western side of India, together with a freedom from travelling cyclonic storms, have combined to give very short rainfall to almost all parts of India. The average pressure difference between Southern and Northern India during September is ordinarily about  $2\frac{1}{2}$ -tenths of an inch, while during the past week the difference reached only two-tenths as a rule, and on the 9th was not much more than one-tenth. Small barometric differences such as these at this season are always accompanied with weak monsoon winds, which in their turn are accompanied with deficient rainfall.

The following is a brief description of the daily distribution of rainfall:

On the 3rd rain was falling all round the Bay of Bengal, as well as over the greater part of Assam and Bengal and as far west as the east of North-Western Provinces. Showers were also reported from the inland parts of the Peninsula, from one or two places on the West Coast, and at one or two in the North-West

Himalaya. Elsewhere the weather was fair. On the 4th a similar distribution prevailed. On the 5th the rainfall showed a further falling off. Slight showers only were reported, except in Bengal, where the amounts were heavier. The chart of the 6th showed slight rainfall at the hill stations in the north-west, over the south and east of the Peninsula, and over Lower Bengal, and fine weather elsewhere. On the morning of the 7th there was no change in the break in the rains, except in Bengal, where, due to a small local depression, there had been some extension of the rainfall area. On the 8th rain had increased somewhat over the central parts of the country, but there was no other change; and on the 9th slight general rain was reported from the Deccan, the Central stations, Bengal, the east of the North-Western Provinces, Assam, and Burma.

The table at the close of the summary shows that thirty-eight of the divisions into which India is divided for rainfall purposes have received deficient rainfall and only twelve have received more than the average. Three divisions in the Punjab, *vis.*, the North-West, West, and Submontane, have received no rain whatever, and the amounts reported from all parts of the Punjab, Rajputana, Sind, Guzerat, and Kathiawar have been very small. The amount of the deficiency in other parts of India varies largely, some divisions having very nearly the normal amount of rainfall, while others in the vicinity have received only trifling falls.

The whole of Burma has had deficient rain; so also has the whole of Bengal and Assam, with the exception of Deltaic Bengal and the valley of the Brahmaputra, where there has been a moderate or slight excess. In Upper India Oudh North has received a very trifling excess, but all the other divisions have received deficient rain—in some cases very largely so. Malabar and the Konkan Coasts have received less than half an inch of rain each during the week, but inland, within the divisions of Madras (South Central), Mysore, and the Deccan, the rainfall has been heavier than usual. Khandeish, Berar, and the Central Provinces have had very deficient rainfall, and in the whole of Rajputana, Guzerat, Kathiawar, and Sind the rain has also been short. On the other hand the whole of Madras, with the exception of the East Coast South, has had heavy rain.

The record of maximum falls exhibits very few instances of large amounts. In some parts of Behar and the North-Western Provinces there are some local falls ranging between 5 and 12 inches, but they are the exception, and in the Punjab the falls are very light. In the west and south of the Peninsula the maximum falls range between 3 and 5 inches, while in the central parts of the country they are still smaller, but on the eastern side of the Peninsula there are several heavy amounts reported.

The concluding column of the table shows an extension of the area over which the seasonal rainfall is short. The following are the divisions where the rainfall is deficient by more than 10 per cent.: Lower and Central Burma, Eastern Bengal, Punjab, Central, Submontane, and hill districts, the Konkan, the Bombay Deccan, Khandeish, Sind, and Rajputana West. In all other parts of the Indian region the seasonal fall equals or nearly equals the normal average.

PROVINCE.	DIVISION.	RAINFALL DATA FOR WEEK ENDING SEPTEMBER 9TH, 1889.			RAINFALL DATA FROM MAY 13TH TO SEPTEMBER 9TH, 1889.		
		Average Actual Rainfall of Division.	Average Normal Rainfall of Division.	Excess or Defect, in inches.	Average Actual Rainfall of Season to date.	Average Normal Rainfall, May 13th to September 9th.	Excess or De- fect of (Season- al) Rainfall expressed as a per- centage.
		Inches.	Inches.	Inches.	Inches.	Inches.	Per cent.
BURMAH	Tenasserim	1'01	7'70	— 6'69	156'18	149'59	+ 4
	Lower Burmah	1'59	4'94	— 3'35	59'43	76'78	— 23
	Central Burmah	1'67	3'20	— 1'53	47'38	61'60	— 23
	Upper Burmah	1'05	?	?	23'28	?	?
	Arakan	3'85	6'13	— 2'28	150'81	156'64	— 4
BENGAL AND ASSAM	Eastern Bengal	2'04	3'98	— 1'94	57'30	67'44	— 15
	Assam (Surma)	3'44	4'14	— 0'70	99'86	78'62	+ 27
	Do. (Brahmaputra)	4'99	3'16	+ 1'83	68'82	57'64	+ 19
	Deltaic Bengal	3'08	2'92	+ 0'16	39'27	42'69	— 8
	Central Bengal	2'89	2'92	— 0'03	40'19	41'55	— 3
	North Bengal	4'11	4'51	— 0'40	86'20	77'16	+ 12
	Orissa	1'20	2'74	— 1'54	38'00	38'15	— 0
	Chota Nagpur	1'62	2'68	— 1'06	38'14	39'76	— 4
	Behar (South)	2'32	2'37	— 0'05	34'99	33'03	+ 6
	Do. (North)	2'25	2'58	— 0'33	40'67	37'12	+ 10
NORTH - WESTERN PROVINCES AND OUDH.	North - Western Provinces (East).	1'66	1'89	— 0'23	37'22	27'91	+ 33
	Oudh (South)	1'15	1'69	— 0'54	37'14	27'95	+ 33
	Do. (North)	2'35	2'21	+ 0'14	36'81	30'59	+ 21
	North - Western Provinces (Central).	0'66	1'84	— 1'18	24'99	24'79	+ 1
	North - Western Provinces (West).	0'23	1'68	— 1'45	21'33	23'10	— 8
	North - Western Provinces (Submontane).	1'24	1'90	— 0'66	44'89	34'34	+ 31
PUNJAB	Punjab (South)	0'04	0'68	— 0'64	11'33	11'38	— 0
	Do. (Central)	0'08	1'50	— 1'42	16'66	19'14	— 13
	Do. (Submontane)	0	1'39	— 1'39	20'00	22'45	— 11
	Do. (Hill Districts)	0'78	2'51	— 1'73	58'65	71'28	— 18
	Do. (North-West)	0	0'81	— 0'81	15'66	16'77	— 7
	Do. (West)	0	0'26	— 0'26	6'65	6'01	+ 2
BOMBAY AND MALA- BAR COAST DIS- TRICTS (MADRAS).	Malabar	0'34	2'46	— 2'12	87'51	90'77	— 4
	Madras (South Central)	1'85	1'08	+ 0'77	26'18	12'57	+ 108
	Coorg	2'03	3'23	— 0'20	82'76	84'60	— 2
	Mysore	4'15	1'18	+ 2'97	15'88	16'04	— 1
	Konkan	0'45	3'31	— 2'86	99'69	80'70	— 24
	Bombay Deccan	1'32	1'14	+ 0'18	19'37	23'82	— 19
	Hyderabad (North)	...	...	...	...	...	...
	Khandeish	0'75	1'33	— 0'58	12'92	17'97	— 28
CENTRAL PROVINCES AND BERAR.	Berar	1'16	1'96	— 0'80	30'10	27'06	+ 11
	Central Provinces (West)	0'78	2'82	— 2'04	30'69	33'35	— 8
	Ditto (Central)	0'60	2'73	— 2'13	40'10	43'13	+ 7
	Ditto (East)	1'46	1'87	— 0'41	48'22	41'82	+ 15
BOMBAY (NORTH)	Guzerat	0'11	2'16	— 2'05	32'16	32'40	— 1
	Kattiawar	0'40	1'55	— 1'15	23'78	23'52	+ 1
	Sind	0'07	0'14	— 0'07	1'55	4'03	— 62
RAJPUTANA AND CEN- TRAL INDIA.	Central India (East)	0'28	1'89	— 1'61	35'52	30'41	+ 17
	Rajputana (East), Central India (West).	0'07	1'73	— 1'66	28'43	22'66	+ 25
	Rajputana (West)	0'10	1'06	— 0'96	8'49	11'36	— 25
MADRAS	East Coast (North)	2'63	1'51	+ 1'12	25'89	19'71	+ 31
	Do. (North) (a)	3'85	2'20	+ 1'65	29'00	29'34	— 1
	Hyderabad (South)	1'83	1'12	+ 0'71	18'69	17'28	+ 8
	Madras (Central)	3'37	0'86	+ 2'51	16'50	13'12	+ 26
	East Coast (Central)	1'61	1'21	+ 0'40	14'87	14'65	+ 2
	Ditto (South)	0'63	1'23	— 0'60	14'31	11'84	+ 21
	Madras (South)	0'70	0'65	+ 0'05	0'56	6'48	+ 1

W. L. DALLAS,

SIMLA, 12th September, 1889.

Assistant Meteorological Reporter to the  
Government of India.

E. C. BUCK,

Secretary to the Government of India.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

Weekly Report on the State of the Season and Prospects of the Crops.

**Madras.**—*For week ending 7th September.*—Rainfall general; good in all districts, except Madras, South Arcot, and Tanjore. Crops generally good, but withering in parts of South Arcot, suffering from want of rain in Trichinopoly and Tinnevely, and damaged by excessive rain in parts of Anantapur. Prices generally falling or stationary. Labourers employed on last day of week,—on Rushikulya works, 3,699; Gopalpur Canal, 1,373; Ghât Roads, 3,710; minor works, 3,644. Number on village relief on 31st August, 46,032, including 28,246 children; fed in kitchens, 10,402, including 7,513 children. Imports into Ganjam during week by sea and land, 394 tons. General prospects favourable.

**Bombay.**—*For week ending 11th September.*—Good rain over the greater part of the Deccan and Southern Mahratta Country and crop prospects improved by it; slight in Güzerat, Kathiawar, Konkan, Khandesh, and Nasik. Total fall still insufficient in parts of Ahmedabad, Broach, Surat, Khandesh, Nasik, Thana, Ratnagiri, Poona, Ahmednagar, Satara, Belgaum, Dharwar, Kanara, and Baroda. Standing crops damaged by rats, insects, and locusts in parts of Karachi; by locusts in parts of Shikarpur and Hyderabad; by insects and locusts in parts of Upper Sind Frontier; and by grasshoppers in parts of Ahmedabad and Panch Mahals; also withering for want of moisture in two talukas of Surat and Poona, one of Ahmednagar, and parts of Nasik. Standing crops otherwise good. Preparation for late crops progressing in parts of Karachi, Hyderabad, Sholapur, Bijapur, and Kathiawar. Fodder scarce in parts of Nasik, Poona, Ahmednagar, Satara, and Belgaum. Drinking water scarce in parts of Upper Sind Frontier, Nasik, Ahmednagar, and Satara. Prices rising in two talukas of Nasik.

**Bengal.**—*For week ending 10th September.*—Fairly general rain has fallen over the whole Province during the week, but there is now a partial break in the rains. Transplanting is nearly finished and the prospects of the winter rice are generally favourable, except in places in Western Bengal, in the south-west of the Sonthal Pergunnahs, and in the Sadr subdivision of Balasore, where the rainfall is still scanty. Autumn rice and jute harvests in some districts are expected to give fair results, while in others the outturn is estimated to be below the average. In Moorshedabad much damage has been caused to the autumn rice by floods, and in the east of Bogra the damage is also considerable. The *bhadoi* crops are being harvested and promise well, except in the inundated parts of Behar, where they have been almost wholly destroyed. Foodstocks continue to be sufficient in the affected tracts. At Motihari the price of common rice has fallen from 10½ to 12 seers a rupee; at Madhubani it is 10½ seers; and at Sitamarhi from 8½ to 9½ seers. In Chumparun and Muzaffarpur agricultural loans are being given and the persons in receipt of charitable relief are increasing. The number of persons employed on relief works are 365 in Bhagalpur and about 1,500 in the Sonthal Pergunnahs.

**North-Western Provinces and Oudh.**—*For week ending 11th September.*—There has been light rain during the week, except in the eastern districts, where floods have occurred. Crops are doing well. Harvesting operations in progress and ploughing for *rabi* has begun in some places. Markets are well supplied. Prices are generally stationary, but in a few districts show a tendency to fall.

**Punjab.**—*For week ending 11th September.*—Rainfall light; showers in Khushab tahsil, Shahpur district, only. Prices falling in Delhi, Mooltan, and Shahpur; rising in Rawalpindi; and stationary elsewhere. Sowings of *kharif*

crops completed. Ploughings for *rabi* commenced in certain districts. Rain wanted in Sialkot. Prospects of standing crops good and promising. Rice crop in Umballa suffering for want of rain. Fodder sufficient throughout the Province.

**Central Provinces.**—*For week ending 11th September.*—Weather seasonable. The rainfall has been slightly deficient in parts of Jubbulpore and Seoni, but the prospects of the *kharif* crops continue favourable. Land being prepared for winter sowings. Prices steady.

**Burma.**—*For week ending 7th September.*—In Lower Burma the rainfall was generally light and in Thayetmyo and Tavoy has not been sufficient, and in Thongwa late planted paddy has suffered from want of heavy rain; elsewhere the crop prospect is good. In Upper Burma there was fair rainfall in Mandalay and Pyinmana, but elsewhere but little fell or there was none at all. Rain is much wanted in Shwebo, Sagain, Lower Chindwin, Pakokku, Meiktila, and Yamethin districts; elsewhere the crop prospect is fair. The price of paddy has risen 9 per cent. in Thongwa, 4 per cent. in Thayetmyo and Magwe; but elsewhere there is little or no change.

**Assam.**—*For week ending 11th September.*—Weather showery; nights unusually cool. Harvesting of early and transplanting of late rice still continue. Tea blight severe in Cachar. Prospects of tea and other crops good, except in Nowgong, where floods have done damage.

**Mysore and Coorg.**—*For week ending 11th September.*—Good rain has fallen throughout the State of Mysore. Standing crops in good condition, except in the Shikarpur taluk of the Shimoga district. Prices slightly fallen in Shimoga.

Good rain in Coorg. Standing crops doing well.

**Berar and Hyderabad.**—*For week ending 11th September.*—Average rainfall good in Berar. Weeding continues. Crops healthy. Fodder sufficient. Prices of food-grains stationary.

Rainfall during week 2.53 inches at Hyderabad; total since 1st January 24.46. Weeding of *kharif* crops concluded and weeding of *rabi* crops in progress. Water in tanks not yet sufficient for *rabi* crops. Prices stationary.

**Central India.**—*For week ending 11th September.*—During the week no rain fell in Gwalior, Bhopawar, or Neemuch. Crop prospects improved in Bhopawar and Bhopal; unchanged elsewhere. Locusts still exist in parts of Barwani. Prices of food-grains high in Goona, falling in Neemuch, steady elsewhere.

**Rajputana.**—*For week ending 11th September.*—Moderate rain in Bikaner; slight in Ajmere and Abu. No rain elsewhere. Standing crops good. Harvest prospects favourable. Locusts reported in districts of Sirohi. Agricultural stock good. Pasturage or fodder sufficient. Prices steady generally.

**Nepal.**—*For week ending 5th September.*—Good rain fell during the week. Early rice is being harvested. Prospects good.

E. C. BUCK,  
Secretary to the Government of India.

GOVERNMENT OF INDIA.  
PUBLIC WORKS DEPARTMENT.  
RAILWAY TRAFFIC.

No. XX. OF 1889-90.

APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used as far as possible.

Latest Return received.	RAILWAYS.	WEEK ENDING 18TH AUGUST, 1888.			WEEK ENDING 17TH AUGUST, 1889.			TOTAL RECEIPTS FROM 1ST APRIL TO 18TH AUGUST, 1888.		TOTAL RECEIPTS FROM 1ST APRIL TO 17TH AUGUST, 1889.		Total increase in 1889-90.	Total decrease in 1889-90.
		Total mean length open.	Receipts.		Total mean length open.	Receipts.		Total.	Per mile open per week.	Total.	Per mile open per week.		
			Total.	Per mile open.		Total.	Per mile open.						
			Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.
State Lines worked by Companies.													
31st August, 1889	East Indian	1,514	6,40,633	423	1,514	6,34,057	419	1,65,81,184	548	1,69,44,920	560	3,63,736	...
31st ditto	Patna-Gya	57	7,679	134	57	6,725	118	1,64,565	144	1,68,454	147	3,889	...
31st ditto	Dildarnagar-Ghazipur	12	582	49	12	679	57	20,279	85	18,415	77	...	1,864
.....	Sindia	75	4,704	63	...	(a)	...	1,49,765	100	(a)	...	...	1,49,765
31st August, 1889	Rajputana-Malwa	1,664	2,32,107	139	1,664	2,91,000	175	69,68,994	209	79,72,224	241	10,03,230	...
24th ditto	Bengal-Nagpur (b)	186	16,533	88	305	(c) 19,176	63	6,40,906	172	(c) 7,36,334	124	95,428	...
24th ditto	Southern Mahratta (d)	850	55,445	65	857	67,048	78	15,42,752	91	16,70,805	98	1,28,053	...
24th ditto	Do. Mysore Section	140	9,749	69	285	19,358	68	2,06,364	74	2,79,173	63	72,809	...
24th ditto	Indian Midland	136	6,723	49	746	(e) 42,416	57	2,95,388	108	(e) 11,14,279	88	8,18,891	...
17th ditto	Villupuram - Dharma- veram (Nellora Branch)	83	4,238	51	83	4,638	56	96,356	58	96,262	58	...	94
17th ditto	Bareilly-Pilibhit	36	1,079	30	36	1,318	37	30,396	44	38,349	56	7,953	...
	TOTAL	4,753	9,79,472	206	5,559	10,86,415	195	2,66,96,949	281	2,90,39,215	271	23,42,266	...
State Lines worked by Government.													
24th August, 1889	North Western (f)	2,469	3,92,749	159	2,386	4,08,865	171	91,60,222	186	1,04,01,878	220	12,41,656	...
24th ditto	Oudh and Rohilkhand	692	92,031	133	692	98,106	142	27,78,376	200	31,15,438	225	3,37,062	...
17th ditto	Bengal Central	125	12,077	97	125	14,350	115	2,34,688	94	2,73,264	109	38,576	...
24th ditto	Wardha Coal	45	11,709	260	45	11,605	238	2,82,777	314	3,14,245	352	31,468	...
31st ditto	Eastern Bengal	673	2,31,125	343	747	2,29,790	308	31,43,222	234	33,72,724	241	2,29,502	...
24th ditto	Nalhati	27	2,705	100	27	2,055	76	38,746	75	37,248	72	...	1,498
24th ditto	Tirhoot	259	22,816	88	273	39,479	145	6,66,286	135	7,57,546	146	91,260	...
17th ditto	Lucknow-Sitapur	105	3,642	35	105	5,619	54	1,00,949	48	1,33,270	63	32,321	...
17th ditto	Sihramau	25	1,209	48	25	1,414	56	22,584	45	23,692	42	1,108	...
17th ditto	Cherra-Companyganj.	7	78	11	7	106	28	1,376	9	2,284	15	908	...
24th ditto	Burma (g)	392	41,815	107	553	70,268	127	11,45,654	151	17,77,075	162	6,31,421	...
	TOTAL	4,819	8,11,956	168	4,985	8,81,747	177	1,75,74,880	183	2,02,08,664	206	26,33,784	...
Lines worked by Guaranteed Companies.													
24th August, 1889	Madras	840	1,61,789	193	840	1,74,234	207	32,75,969	195	36,03,093	216	3,27,124	...
24th ditto	South Indian	654	1,06,905	163	654	1,03,798	159	21,03,360	165	22,72,680	175	1,09,320	...
24th ditto	Great Indian Peninsula	1,497	(h) 5,08,424	340	1,440	(i) 3,37,756	235	1,73,85,823	579	1,33,52,732	460	...	40,33,091
24th ditto	Bombay, Baroda and Central India (j)	461	1,53,095	332	461	1,66,000	360	49,47,264	537	52,82,666	577	3,35,342	...
	TOTAL	3,452	9,30,213	269	3,395	7,81,788	230	2,77,72,416	402	2,45,11,111	364	...	32,61,305
GRAND TOTAL (GUARANTEED AND STATE)													
	GROSS ESTIMATED EXPENSES	...	...	...	...	...	...	3,74,51,802	144	3,82,06,461	140	7,54,659	...
	NET RECEIPTS	...	...	...	...	...	...	3,45,92,443	133	3,55,52,529	131	9,60,086	...
Assisted Companies.													
31st August, 1889	Tarakeshwar	22	4,223	192	22	4,611	210	1,16,286	261	1,16,606	262	320	...
10th ditto	Dibru-Sadiya	...	...	...	...	(k)	...	(l) 1,64,504	111	(m) 1,84,989	125	20,485	...
24th ditto	Bengal and North- Western	376	32,763	87	376	38,150	101	10,09,041	134	10,67,561	143	58,520	...
24th ditto	Rohilkhand-Kumaun	67	5,191	77	67	5,820	87	1,46,774	115	1,50,930	119	4,156	...
	TOTAL	465	42,177	91	465	48,581	104	14,36,605	132	15,20,086	141	83,481	...
Native States.													
17th August, 1889	His Highness the Ni- zam's Guaranteed	310	30,589	99	354	43,028	122	6,06,168	108	8,23,124	117	2,16,956	...
24th ditto	His Highness the Gaekwar's	59	1,351	23	59	1,780	30	54,393	46	53,352	46	...	1,041
24th ditto	His Highness the Gaek- war's Veramgam- Mehsana-Vadnagar	21	741	35	27	600	22	19,123	46	23,034	43	3,911	...
24th ditto	Bhavnagar-Gondal- Junagarh-Porbandar	193	13,084	68	261	16,642	64	4,06,138	105	5,58,516	108	1,52,378	...
24th ditto	Morvi	68	2,571	38	68	2,202	32	77,439	57	85,339	63	7,900	...
24th ditto	Jodhpore	124	4,123	33	124	4,800	39	1,48,834	60	1,36,531	55	...	11,303
	TOTAL	775	52,459	68	893	69,032	77	13,11,595	88	16,79,896	95	3,68,301	...

(a) Included with Indian Midland Railway.

(b) Includes the Katni-Umaria Branch.

(c) Includes the Sanctoria Coal Section of the Bengal-Nagpur Railway.

(d) Includes the Bellary-Kistna State Railway.

(e) Includes the Sindia and Bhopal-Itarsi State Railways.

(f) Includes the Amritsar-Pathankot and Rajpura-Bhatinda State Railways.

(g) Includes the Toungoo-Mandalay extension.

(h) Includes the Dhond-Manmad, Khámgaon, Amráoti, and Bhopal-Itarsi State Railways.

(i) Includes the Dhond-Manmad, Khámgaon, and Amráoti State Railways.

(j) Includes the Patri Branch.

(k) Return not received.

(l) Total receipts from 1st April to 11th August, 1888.

(m) Total receipts from 1st April to 10th August, 1889.

SINLA, 12th September, 1889.

M. C. BRACKENBURY, Major, R.E.,  
Under-Secretary.

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SUPPLEMENT TO  
**The Gazette of India.**

No. 38.] CALCUTTA, SATURDAY, SEPTEMBER 21, 1889.

OFFICIAL PAPERS.

*A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor General will in future be published in PART VI of the GAZETTE.*

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GOVERNMENT OF INDIA.  
DEPARTMENT OF FINANCE AND COMMERCE.

RETAIL PRICES FOR THE 2nd HALF OF JULY 1889.

QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.

Districts.	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLAM (Sorghum vulgare).		BAJRA OR CUMBU. (Pennisetum typhoides).		MARUA OR RAGI (Eleusine indica).		KANGNI OR KAKUN, ITALIAN MILLET (Setaria italica).		GRAM, CHENNA, CHOLA, KADALAY OR SUNAGA (Cicer arietinum).		MAIZE (Zea Mays).		ARHAR, OR THOR, CADIAN PEA (Cajanus indicus).		FIREWOOD.		SALT.	
	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.
	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
<b>Burma—</b>																										
<b>Tenasserim—</b>																										
Mergui . . . . .	...	...	...	...	9 14	9 14	10 7	10 14	...	...	...	...	...	...	...	...	...	...	...	...	...	428 0	428 0	11 11	11 11	...
Tavoy . . . . .	...	...	...	...	11 4	11 4	14 0	13 4	...	...	...	...	...	...	...	...	...	...	...	...	...	399 3	399 3	24 2	24 2	...
Modimem and Amherst . . . . .	7 14	7 14	...	...	9 11	9 11	10 2	10 2	...	...	...	...	...	...	...	...	...	...	...	...	...	220 0	220 0	20 8	20 8	...
<b>Pegu (dellair)—</b>																										
Pegu . . . . .	...	...	...	...	9 7	9 7	11 3	11 3	...	...	...	...	...	...	...	...	...	...	...	...	...	140 0	134 0	17 10	17 10	...
Kangoon . . . . .	...	...	...	...	12 6	12 6	13 2	13 2	...	...	...	...	...	...	...	...	...	...	...	...	...	250 0	250 0	14 9	14 9	...
Thongwa . . . . .	...	...	...	...	10 13	10 13	12 13	12 10	...	...	...	...	...	...	...	...	...	...	...	...	...	150 0	150 0	18 12	18 12	...
Bassein . . . . .	...	...	...	...	12 3	12 3	14 7	15 2	...	...	...	...	...	...	...	...	...	...	...	...	...	263 0	243 13	14 3	14 3	...
<b>Pegu (inland)—</b>																										
Shwaygyin . . . . .	...	...	...	...	8 8	8 8	9 9	9 9	...	...	...	...	...	...	...	...	...	...	...	...	...	250 0	250 0	14 2	14 2	...
Tharawadi . . . . .	...	...	...	...	12 0	12 0	15 0	15 0	...	...	...	...	...	...	...	...	...	...	...	...	...	450 0	450 0	14 0	14 0	...
Henzada . . . . .	...	...	...	...	10 4	10 4	15 10	15 10	...	...	...	...	...	...	...	...	...	...	...	...	...	183 8	183 8	17 11	17 11	...
Prome . . . . .	...	...	...	...	10 12	10 12	13 1	13 1	...	...	...	...	...	...	...	...	...	...	...	...	...	167 9	167 9	14 0	14 0	...
Toungoo . . . . .	...	...	...	...	9 2	9 2	12 13	12 13	...	...	...	...	...	...	...	...	...	...	...	...	...	200 0	200 0	14 1	14 1	...
Thayetmyo . . . . .	...	...	...	...	10 0	10 12	11 8	12 9	...	...	...	...	...	...	...	...	...	...	...	...	...	326 11	326 11	11 3	11 3	...
<b>Upper Burma—</b>																										
Mandalay . . . . .	10 10	10 11	...	...	10 2	11 5	11 10	12 9	...	...	...	...	...	...	...	...	...	...	...	...	...	80 0	70 0	17 12	17 12	...
<b>Arahan—</b>																										
Sandoway . . . . .	...	...	...	...	13 8	11 10	14 14	12 11	...	...	...	...	...	...	...	...	...	...	...	...	...	469 11	469 11	24 0	24 0	...
Kyaukp-pyn . . . . .	...	...	...	...	10 9	10 9	11 7	11 6	...	...	...	...	...	...	...	...	...	...	...	...	...	320 0	320 0	36 0	36 0	...
Akyab . . . . .	...	...	...	...	11 8	11 0	13 8	13 0	...	...	...	...	...	...	...	...	...	...	...	...	...	160 0	160 0	16 0	16 0	...
<b>Assam—</b>																										
<b>Surma—</b>																										
Sylhet . . . . .	11 4	11 4	...	...	14 0	14 0	16 3	16 3	...	...	...	...	...	...	...	...	...	...	...	...	...	108 0	108 0	10 0	10 0	...
Cachar . . . . .	7 8	7 12	...	...	10 0	10 0	16 0	15 4	...	...	...	...	...	...	...	...	...	...	...	...	...	80 0	80 0	9 8	9 8	...
Khási and Jaintia Hills . . . . .	...	...	...	...	6 0	6 0	8 0	7 12	...	...	...	...	...	...	...	...	...	...	...	...	...	100 0	100 0	7 0	7 0	...
Garo Hills . . . . .	...	...	...	...	6 0	6 0	14 0	13 0	...	...	...	...	...	...	...	...	...	...	...	...	...	160 0	160 0	6 7	6 7	...
<b>Brahmaputra—</b>																										
Goalpara . . . . .	16 0	16 0	...	...	8 0	8 0	13 0	14 0	...	...	...	...	...	...	...	...	...	...	...	...	...	80 0	80 0	9 0	9 0	...
Kamrup . . . . .	10 8	10 8	...	...	8 0	8 0	14 0	14 0	...	...	...	...	...	...	...	...	...	...	...	...	...	160 0	160 0	9 0	9 0	...
Darrang . . . . .	6 8	6 8	...	...	11 10	11 8	13 0	13 0	...	...	...	...	...	...	...	...	...	...	...	...	...	150 0	150 0	9 8	9 8	...
Nowgong . . . . .	8 0	8 0	...	...	7 8	7 8	16 0	16 0	...	...	...	...	...	...	...	...	...	...	...	...	...	120 0	120 0	9 0	9 0	...
Sibsagar . . . . .	...	...	...	...	6 0	6 0	10 0	13 0	...	...	...	...	...	...	...	...	...	...	...	...	...	100 0	100 0	8 0	8 0	...
Lakhimpur . . . . .	8 0	8 0	...	...	6 8	6 8	11 0	11 0	...	...	...	...	...	...	...	...	...	...	...	...	...	160 0	160 0	8 0	8 0	...





[illegible]

**§ Not sold.**

♦ Six pies per bundle.

† For husked grain.

## RETAIL PRICES FOR THE 2nd HALF OF JULY 1889—continued.

QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.

DISTRICTS.	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLEM (Sorghum vulgare).		BAJRA OR CUMBU (Pennisetum typhoides).		MARUA OR RAGI (Eleusine coracana).		KANGNI OR KAKRI, ITALIAN MILLET (Setaria italica).		GRAM, CHENNA, CHOLA, KADALAY OR SUNAGA (Cicer arietinum).		MAIZE (Zea Mays).		ARHAR, OR THUR, CADJAN PEA (Cajanus indicus).		FIREWOOD.		SALT.	
	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past
	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
<b>Punjab—</b>																										
Southern—																										
Hisar . . . . .	17 0	18 0	24 0	25 0	...	...	10 0	10 0	19 0	22 0	18 0	20 0	...	...	16 0	16 0	23 0	25 0	17 0	18 0	...	...	110 0	110 0	10 8	10 12
Ferozepore . . . . .	19 0	19 0	30 0	30 0	...	...	9 0	9 0	24 0	24 0	16 0	16 0	...	...	28 0	28 0	24 0	24 0	19 0	18 0	...	...	100 0	100 0	13 0	13 4
Montgomery . . . . .	18 0	18 0	24 0	23 0	...	...	9 0	9 0	18 0	18 0	15 0	15 0	...	...	...	...	...	...	16 0	16 0	...	...	200 0	200 0	11 0	11 0
<b>Central—</b>																										
Gurgaon . . . . .	16 0	17 0	24 0	24 0	...	...	9 0	11 0	24 0	19 0	21 0	20 0	...	...	...	...	23 0	23 0	22 0	20 0	...	...	130 0	130 0	11 0	11 0
Delhi . . . . .	17 0	17 0	23 0	23 0	...	...	10 0	10 0	21 0	21 0	18 0	17 0	...	...	12 0	12 0	22 0	23 0	20 0	20 0	...	...	80 0	80 0	11 0	11 0
Kohat . . . . .	17 0	17 0	24 0	24 0	...	...	10 0	10 0	24 0	24 0	20 0	20 0	...	...	16 0	16 0	24 0	25 0	16 0	16 0	...	...	120 0	120 0	10 0	10 0
Karnal . . . . .	17 0	17 0	26 0	26 0	...	...	10 0	11 0	20 0	20 0	16 0	16 0	...	...	18 0	18 0	25 0	26 0	24 0	22 0	...	...	160 0	160 0	10 0	10 0
Lahore . . . . .	18 0	18 0	32 0	30 0	...	...	9 0	9 0	22 0	24 0	16 0	16 0	...	...	22 0	20 0	27 0	27 0	16 0	24 0	...	...	95 0	95 0	12 0	12 0
<b>Sub-montane—</b>																										
Umballa . . . . .	20 0	20 0	24 0	24 0	...	...	10 0	10 0	18 0	18 0	17 0	17 0	...	...	10 0	10 0	27 0	27 0	32 0	32 0	...	...	120 0	120 0	12 8	13 0
Ludhiana . . . . .	22 0	21 0	32 0	32 0	...	...	10 0	10 0	27 0	27 0	23 0	23 0	...	...	21 0	21 0	29 0	29 0	32 0	32 0	...	...	110 0	110 0	12 8	12 8
Jullundur . . . . .	20 0	20 0	30 0	30 0	...	...	10 0	8 0	24 0	24 0	20 0	20 0	...	...	20 0	20 0	28 0	27 0	32 0	32 0	...	...	90 0	90 0	12 8	12 8
Hoshiarpur . . . . .	22 0	22 0	32 0	34 0	...	...	10 0	10 0	26 0	25 0	20 0	16 0	...	...	24 0	24 0	29 0	28 0	30 0	28 0	...	...	100 0	100 0	12 12	12 12
Curdaspur . . . . .	22 0	22 0	28 0	28 0	...	...	12 0	12 0	18 0	18 0	14 0	14 0	...	...	12 0	12 0	24 0	24 0	22 0	22 0	...	...	120 0	120 0	13 0	13 0
Amritsar . . . . .	21 0	20 0	30 0	29 0	...	...	10 0	9 0	27 0	24 0	15 0	14 0	...	...	25 0	23 0	27 0	28 0	26 0	23 0	...	...	90 0	90 0	13 0	13 0
<b>Hills—</b>																										
Simla . . . . .	13 0	13 0	20 0	19 0	...	...	8 0	8 0	15 0	15 0	11 0	11 0	...	...	8 0	8 0	16 0	15 0	19 0	19 0	...	...	60 0	60 0	8 8	8 8
Kangra . . . . .	19 0	19 0	28 0	28 0	...	...	12 0	12 0	14 0	14 0	10 0	10 0	...	...	8 0	8 0	20 0	21 0	24 0	25 0	...	...	100 0	100 0	10 0	10 0
<b>North-western—</b>																										
Sialkote . . . . .	21 0	21 0	30 0	30 0	...	...	11 0	11 0	22 0	22 0	22 0	22 0	...	...	19 0	19 0	27 0	26 0	22 0	21 0	...	...	160 0	160 0	13 0	13 0
Gujranwala . . . . .	19 0	19 0	35 0	35 0	...	...	9 0	11 0	23 0	20 0	16 0	16 0	...	...	20 0	20 0	28 0	27 0	23 0	20 0	...	...	105 0	105 0	13 0	13 0
Gujrat . . . . .	22 0	22 0	34 0	33 0	...	...	10 0	10 0	23 0	20 0	20 0	20 0	...	...	12 0	12 0	27 0	26 0	22 0	22 0	...	...	120 0	120 0	14 0	14 0
Jhelum . . . . .	21 0	21 0	31 0	31 0	...	...	8 0	9 0	24 0	22 0	20 0	21 0	...	...	15 0	15 0	25 0	24 0	20 0	20 0	...	...	160 0	160 0	14 0	14 0
Rawalpindi . . . . .	21 0	20 0	36 0	35 0	...	...	11 0	11 0	22 0	17 0	18 0	16 0	...	...	15 0	16 0	25 0	24 0	24 0	22 0	...	...	85 0	85 0	13 8	13 8
Hazara . . . . .	21 0	21 0	37 0	34 0	...	...	11 0	11 0	22 0	22 0	12 0	12 0	...	...	12 0	12 0	21 0	20 0	22 0	22 0	...	...	90 0	90 0	10 8	10 8
Peshawar . . . . .	21 0	21 0	44 0	43 0	...	...	10 0	10 0	40 0	38 0	15 0	15 0	...	...	19 0	20 0	22 0	21 0	30 0	29 0	...	...	105 0	105 0	38 0	40 0
Kohat . . . . .	22 0	24 0	41 0	45 0	...	...	11 0	11 0	26 0	30 0	18 0	20 0	...	...	19 0	20 0	23 0	23 0	20 0	23 0	...	...	125 0	125 0	56 0	56 0
<b>Western—</b>																										
Shahpur . . . . .	22 0	24 0	32 0	35 0	...	...	10 0	9 0	21 0	22 0	22 0	22 0	...	...	20 0	20 0	30 0	30 0	20 0	22 0	...	...	240 0	240 0	13 0	13 0
Jhang . . . . .	20 0	20 0	28 0	29 0	...	...	10 0	10 0	20 0	16 0	16 0	16 0	...	...	20 0	18 0	20 0	20 0	16 0	16 0	...	...	240 0	240 0	12 0	12 0
Mooltan . . . . .	15 0	15 0	22 0	22 0	...	...	10 0	10 0	20 0	20 0	18 0	18 0	...	...	25 0	24 0	22 0	21 0	25 0	24 0	...	...	100 0	100 0	13 0	12 0
Bannu . . . . .	29 0	29 0	39 0	37 0	...	...	11 0	11 0	23 0	24 0	19 0	18 0	...	...	10 0	8 0	31 0	31 0	33 0	31 0	...	...	60 0	60 0	40 0	40 0
D. I. Khan . . . . .	21 0	21 0	32 0	36 0	...	...	7 0	7 0	22 0	20 0	16 0	16 0	...	...	6 0	6 0	27 0	26 0	16 0	16 0	...	...	112 0	112 0	42 0	40 0
Muzaffargarh . . . . .	17 0	17 0	25 0	25 0	...	...	13 0	13 0	16 0	15 0	20 0	20 0	...	...	11 0	11 0	19 0	19 0	16 0	16 0	...	...	110 0	110 0	12 0	12 0
D. G. Khan . . . . .	16 0	16 0	24 0	24 0	...	...	9 0	9 0	23 0	23 0	20 0	20 0	...	...	...	...	21 0	21 0	20 0	20 0	...	...	125 0	125 0	26 0	25 0
<b>Sind and Baluchistan—</b>																										
Karachi . . . . .	11 8	12 0	17 0	18 0	...	...	10 0	10 0	15 0	15 0	13 8	13 8	...	...	...	...	17 0	17 0	16 0	16 0	...	...	90 0	90 0	14 0	14 0
Hyderabad (Gidu Bandar) . . . . .	12 8	12 8	15 0	15 0	...	...	10 0	9 8	18 0	17 8	14 8	14 8	...	...	...	...	14 8	14 8	...	...	...	...	160 0	160 0	11 8	11 8
Thar and Parkar (Umarkot) . . . . .	13 0	13 0	...	...	...	...	12 0	12 0	...	...	13 0	13 0	...	...	...	...	18 0	18 0	...	...	...	...	160 0	160 0	12 0	12 0
Sukkur . . . . .	14 0	14 0	21 8	23 0	...	...	12 0	12 0	21 0	20 0	18 0	18 0	...	...	...	...	17 8	17 8	...	...	...	...	160 0	160 0	11 8	11 8
Shikarpur . . . . .	12 8	12 8	19 8	19 8	...	...	10 0	9 8	19 8	19 8	18 8	18 8	...	...	...	...	19 0	19 0	...	...	...	...	160 0	160 0	11 0	11 0
Upper Sind Frontier . . . . .	12 8	12 8	18 8	18 8	...	...	10 0	10 0	22 0	22 0	19 0	19 0	...	...	...	...	19 0	19 0	...	...	...	...	160 0	160 0	11 0	11 0
Quetta . . . . .	12 4	12 8	15 12	15 12	...	...	7 14	7 14	16 8	17 0	...	...	...	...	...	...	11 4	12 12	18 0	20 0	...	...	64 0	64 0	8 8	9 0

**Bombay—****Kanhan—**

Karwar	10 4	10 8	...	6 8	6 8	10 14	10 8	18 0	18 0	13 0	13 0	21 0	20 0	...	...	11 8	12 0	...	...	10 0	10 0	213 5	213 3	11 0	11 0
Randgiri	9 4	9 4	...	8 8	8 8	9 14	9 14	14 4	14 4	13 8	13 8	16 7	16 7	...	...	11 4	11 4	...	...	9 9	9 9	135 0	135 0	11 8	11 8
Colaba (Alibag)	9 13	9 13	...	...	...	9 5	9 5	...	...	...	...	...	...	...	...	11 12	11 12	...	...	...	...	85 0	85 0	12 0	12 0
Bombay	10 0	10 0	16 5	7 2	6 15	10 10	10 7	16 0	15 7	13 9	13 9	17 14	17 13	11 4	11 4	14 4	14 7	18 5	...	...	...	72 13	72 13	11 3	11 3
Tanna (Salsette)	8 0	8 0	...	7 3	7 3	9 7	9 7	...	...	11 4	11 4	...	...	...	...	12 5	12 5	...	...	...	...	71 2	71 2	12 4	12 4

**Deccan—**

Dharwar (Hulbi)	15 0	15 0	...	11 0	11 0	12 0	12 0	20 0	20 0	17 0	17 0	24 0	24 0	...	...	12 0	12 0	...	...	20 0	20 0	80 0	80 0	9 0	9 0
Belgaum	13 0	13 0	...	11 0	11 0	12 0	12 0	19 0	19 0	19 0	19 0	23 0	23 0	...	...	11 8	12 8	...	...	10 0	10 0	65 0	65 0	12 0	12 0
Satara	10 11	10 11	13 0	8 3	8 3	10 0	10 0	15 15	14 10	12 15	12 15	16 5	16 5	14 5	14 5	13 0	15 0	19 2	...	...	...	97 1	97 1	13 0	13 0
Sholapur	14 1	14 1	17 6	7 9	7 9	9 7	9 7	19 13	19 3	15 10	15 10	...	...	...	...	15 8	15 8	...	...	15 1	15 1	80 0	80 0	11 8	11 8
Bijapur	13 8	13 8	10 5	7 3	7 3	9 2	9 2	19 0	19 0	15 14	15 14	...	...	...	...	10 9	10 9	...	...	10 10	10 10	80 0	80 0	10 8	10 8
Poona (City)	11 8	11 8	13 10	8 13	8 13	9 3	9 3	13 13	15 4	13 13	12 10	16 10	16 6	...	...	12 10	12 10	...	...	14 6	14 6	60 13	60 13	11 15	11 15

**Khandesh—**

Ahmednagar	12 8	12 8	...	7 6	7 6	8 3	8 3	14 8	14 8	12 8	12 8	...	...	...	...	12 4	12 4	...	...	14 2	14 2	91 7	91 7	11 6	11 6
Nasik	14 1	14 1	...	9 0	9 0	10 8	10 8	...	...	14 1	14 1	14 3	14 5	10 14	10 14	13 6	12 15	...	...	10 1	10 1	106 8	106 8	13 8	13 8
Khandesh (Dhulia)	12 7	12 7	...	7 8	7 8	9 6	9 6	15 7	15 7	15 0	13 0	...	...	...	...	11 13	11 13	...	...	...	...	100 0	100 0	10 8	10 8

**Guerral—**

Surat	10 0	10 0	12 0	6 0	6 0	8 0	8 0	15 0	15 0	14 0	14 0	...	...	6 0	6 0	11 0	10 0	...	...	14 0	14 0	90 0	90 0	13 0	13 0
Broach	10 8	10 8	...	7 8	7 8	10 0	10 0	17 0	17 0	13 4	13 4	...	...	...	...	10 8	10 8	...	...	13 4	13 4	90 0	90 0	12 12	12 12
Kaira	13 5	13 5	20 0	7 7	7 7	9 11	9 11	15 4	14 8	14 3	14 3	16 0	16 0	...	...	12 12	12 12	...	...	...	...	90 0	90 0	13 5	13 5
Baroda Camp (Sadar Bazar)	9 2	9 2	12 9	6 4	6 4	6 15	6 15	14 14	14 14	13 11	13 11	15 6	15 6	...	...	9 94	9 94	...	...	9 2	9 2	80 0	80 0	10 134	10 134
Ahmedabad (Daskrohi)	11 8	11 8	20 0	6 0	6 0	8 0	8 0	16 0	16 0	14 8	14 8	...	...	...	...	17 0	16 0	...	...	9 8	9 8	80 0	80 0	13 8	13 8
Panch Mahals (Godhra)	10 0	10 0	...	7 2	7 2	10 0	10 0	17 6	17 6	14 4	14 4	17 6	17 6	...	...	15 0	15 0	16 0	...	9 2	9 2	160 0	160 0	11 2	11 2
Deesa Cantonment	14 0	13 13	14 8	6 8	6 8	8 0	8 0	14 8	14 8	14 8	13 13	...	...	...	...	15 8	15 1	13 0	...	11 0	11 0	145 0	145 0	11 0	11 0

**Kathiawar—**

Rajkot	12 12	12 12	...	6 0	6 0	8 0	8 0	14 4	13 10	12 12	12 12	...	...	...	...	13 4	13 4	...	...	7 0	7 0	80 0	80 0	40 0	40 0
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**Central Provinces—****Western—**

Nimar	13 8	13 8	...	7 8	7 8	10 9	10 9	19 1	19 1	16 8	16 8	...	...	...	...	...	...	...	...	9 14	9 14	120 0	120 0	10 13	10 13
Khandwa-Asirgarh Cant.	12 8	12 8	...	8 14	9 0	10 0	10 0	17 12	17 12	...	...	...	...	...	...	13 12	13 8	...	...	11 0	10 11	160 0	160 0	9 0	9 0
Hoshangabad	14 8	14 8	...	6 8	6 8	7 8	7 8	...	...	...	...	...	...	...	...	17 0	17 0	...	...	13 0	13 0	320 0	320 0	7 9	7 9
Betul	15 0	15 0	...	...	...	10 0	10 0	17 7	17 7	...	...	...	...	...	...	16 0	16 0	...	...	9 11	9 11	160 0	160 0	8 0	8 0
Chhindwara	16 0	16 14	...	8 0	8 0	11 4	11 4	18 12	18 12	...	...	...	...	...	...	19 0	19 0	...	...	10 4	10 4	110 0	110 0	9 13	9 13
Nagpur	16 4	16 4	...	8 2	8 2	10 7	10 7	18 7	18 7	...	...	...	...	...	...	16 4	16 4	...	...	13 2	13 2	124 0	124 0	10 11	10 11
Wardha	16 0	16 0	...	8 0	7 4	10 7	10 0	18 7	18 7	...	...	...	...	...	...	17 2	16 0	...	...	15 0	17 2	...	...	10 2	10 2

**Central—**

Narsinghpur	13 8	13 8	...	8 8	8 8	10 6	10 6	...	...	...	...	...	...	...	...	17 10	17 10	...	...	12 10	12 10	200 0	200 0	9 2	9 2
Saugor	14 0	14 0	...	8 4	8 4	9 4	9 4	...	...	...	...	...	...	...	...	16 8	19 0	...	...	11 7	11 7	140 0	140 0	9 1	9 1
Damoh	14 2	14 2	...	10 15	10 15	11 7	11 7	...	...	...	...	...	...	...	...	18 7	18 7	...	...	10 11	10 11	200 0	200 0	9 2	9 2
Jubbulpore	15 0	15 0	...	8 0	8 0	9 8	9 8	16 0	16 0	...	...	...	...	...	...	16 12	16 12	...	...	12 0	12 0	130 0	130 0	9 0	9 0
Mandla	16 0	16 0	...	9 0	8 0	11 0	10 0	...	...	...	...	...	...	...	...	18 0	19 0	...	...	9 0	11 0	256 0	256 0	9 0	9 0
Seoni	17 4	16 9	...	9 5	9 5	12 2	12 2	...	...	...	...	...	...	...	...	19 8	19 8	...	...	10 15	10 15	200 0	200 0	9 2	9 2
Balaghat	17 1	15 12	...	11 13	10 8	14 0	14 0	...	...	...	...	...	...	...	...	15 10	15 10	...	...	12 8	11 4	192 0	192 0	8 0	8 0
Bhandara	16 4	15 0	...	...	...	11 12	11 12	...	...	...	...	...	...	...	...	17 8	16 4	...	...	12 8	12 8	180 0	180 0	9 2	9 2
Chanda	15 0	15 0	...	...	...	12 13	12 13	20 0	20 0	...	...	...	...	...	...	19 3	19 3	...	...	12 15	12 15	615 0	615 0	9 5	9 5

**Eastern—**

Bilaspur	17 12	...	...	10 2	10 2	13 8	13 8	...	...	...	...	...	...	...	...	13 10	...	...	...	14 4	14 4	96 0	96 0	9 0	9 0
Raipur	19 11	19 11	...	10 2	10 2	14 12	14 12	...	...	...	...	...	...	...	...	15 0	15 0	...	...	13 0	13 0	64 0	64 0	8 0	8 0
Sambalpur	12 4	11 6	...	11 6	11 6	16 10	16 10	...	...	...	...	...	...	...	...	9 12	9 12	...	...	8 0	8 0	160 0	160 0	8 5	8 5

**Berar—**

Buldana	15 0	15 0	...	8 0	8 0	10 0	10 0	19 0	18 0	16 0	16 0	...	...	...	...	13 0	13 0	...	...	10 0	10 0	...	...	9 0	9 0
Basim	17 2	17 1	...	8 6	8 6	10 8	10 8	22 12	22 12	24 0	24 0	...	...	...	...	18 0	18 0	...	...	13 8	13 8	...	...	10 8	10 8
Alota	14 0	14 0	...	6 8	6 8	8 0	8 0	16 0	16 0	13 0	13 0	...	...	...	...	16 8	16 8	...	...	17 0	17 0	...	...	10 8	10 8
Elichpur	14 0	14 0	...	7 12	7 0	8 12	8 0	16 0	16 0	13 0	13 0	...	...	...	...	14 0	14 0	...	...	17 0	17 4	...	...	9 0	9 0
Amroli	14 0	13 15	...	7 0	7 0	8 0	8 0	17 10	17 6	13 0	12 12	...	...	...	...	14 2	14 0	...	...	11 0	11 4	...	...	9 0	9 0
Wun	14 2	14 0	...	8 0	8 0	10 0	10 0	20 0	21 0	...	...	...	...	...	...	16 0	16 0	...	...	20 0	20 0	...	...	10 0	10 0

**Nizam's Territories—**

Secunderabad	12 7	11 11	...	6 12	6 10	9 7	9 7	17 12	17 12	...	...	...	...	...	...	14 7	14 2	...	...	19 7	18 13	115 0	115 0	9 0	9 0
Holaram	12 14	12 14	...	7 1	7 5	8 6	8 6	19 15	19 15	...	...	...	...	...	...	15 9	15 9	...	...	...	...	116 14	116 14	9 0	9 0
Chadarghat	10 0	10 0	...	7 0	7 0	9 8	9 8	20 0	19 0	...	...	...	...	...	...	14 12	13 8	...	...	...	...	120 0	120 0	9 8	9 8

\* Not sold.

† Not produced.

‡ Not procurable.

§ Firewood is sold by head-loads, cart-loads, and bullock-loads.

## RETAIL PRICES FOR THE 2ND HALF OF JULY 1889—concluded.

QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.

DISTRICTS.	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLU (Sorghum vulgare).		BAJRA OR CUMBU (Pennisetum typhoides).		MARUA OR RAGI (Eleusine indica).		KANGNI OR KAKUM, ITALIAN MILLET (Setaria italica).		GRAM, CHENNA, CHOLAY, KADALAY OR SUNAGA (Cicer arietinum).		MAIZE (Zea Mays).		ARHAP, OR THUR, CADIAN PEA (Crotalaria indicus).		FIREWOOD.		SALT.	
	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.
<b>Madras—</b>																										
Malabar Coast—																										
Malabar . . . . .	8 10	8 10	8 10	8 10	11 5	11 5	12 3	12 3	12 3	12 3	12 3	12 3	20 6	20 6	20 6	20 6	20 6	20 6	20 6	20 6	20 6	20 6	136 2	136 2	11 11	11 11
S. Canara . . . . .	8 2	8 2	8 2	8 2	10 10	10 10	11 5	11 5	11 5	11 5	11 5	11 5	21 13	21 13	21 13	21 13	21 13	21 13	21 13	21 13	21 13	21 13	128 13	128 13	12 5	12 5
<b>South, central—</b>																										
Combarore . . . . .	11 8	11 8	11 8	11 8	12 10	12 10	13 10	13 10	21 11	21 11	21 11	21 11	26 3	26 3	26 3	26 3	26 3	26 3	26 3	26 3	26 3	26 3	133 10	133 10	12 11	12 11
Nilgris . . . . .	10 11	10 11	10 11	10 11	10 0	9 10	11 3	11 3	20 0	20 0	20 0	20 0	20 3	20 3	20 3	20 3	20 3	20 3	20 3	20 3	20 3	20 3	161 13	161 13	11 0	11 0
Salem . . . . .	10 13	10 13	10 13	10 13	11 3	11 3	13 3	13 3	25 14	25 14	25 14	25 14	29 2	29 2	29 2	29 2	29 2	29 2	29 2	29 2	29 2	29 2	186 10	186 10	13 8	13 8
<b>Central—</b>																										
Belary . . . . .	13 6	13 6	13 6	13 6	11 13	11 13	13 5	13 5	28 10	28 10	28 10	28 10	34 0	34 0	34 0	34 0	34 0	34 0	34 0	34 0	34 0	34 0	97 3	97 3	11 14	11 14
Anantapur . . . . .	11 8	11 8	11 8	11 8	12 13	12 13	14 0	14 0	30 14	30 14	30 14	30 14	31 0	31 0	31 0	31 0	31 0	31 0	31 0	31 0	31 0	31 0	194 6	194 6	10 11	10 11
Cuddapah . . . . .	12 14	12 14	12 14	12 14	13 5	13 5	15 5	15 5	20 8	20 8	20 8	20 8	30 0	30 0	30 0	30 0	30 0	30 0	30 0	30 0	30 0	30 0	140 0	140 0	12 2	12 2
Kurnool . . . . .	11 6	11 6	11 6	11 6	10 11	10 11	11 6	11 6	24 11	24 11	24 11	24 11	25 0	25 0	25 0	25 0	25 0	25 0	25 0	25 0	25 0	25 0	142 14	142 14	11 11	11 11
<b>East Coast, north—</b>																										
Ganjam . . . . .	7 2	8 0	7 2	8 0	9 8	9 8	10 0	10 0	17 13	17 13	17 13	17 13	18 3	18 3	18 3	18 3	18 3	18 3	18 3	18 3	18 3	18 3	167 11	167 11	11 13	11 13
Visakhapatnam . . . . .	12 0	12 0	12 0	12 0	9 0	9 0	10 3	10 3	23 0	23 0	23 0	23 0	25 8	25 8	25 8	25 8	25 8	25 8	25 8	25 8	25 8	25 8	243 0	243 0	11 11	11 11
Godavari . . . . .	9 14	10 13	9 14	10 13	13 6	13 6	14 8	14 8	23 0	23 0	23 0	23 0	25 8	25 8	25 8	25 8	25 8	25 8	25 8	25 8	25 8	25 8	243 0	243 0	12 0	12 0
<b>East Coast, central—</b>																										
Kistna . . . . .	10 6	10 6	10 6	10 6	11 8	11 8	12 2	12 2	19 0	19 0	19 0	19 0	23 13	23 13	23 13	23 13	23 13	23 13	23 13	23 13	23 13	23 13	170 2	170 2	13 3	13 3
Nellore . . . . .	10 10	10 10	10 10	10 10	12 3	12 3	13 3	13 3	22 11	22 11	22 11	22 11	27 13	27 13	27 13	27 13	27 13	27 13	27 13	27 13	27 13	27 13	93 5	93 5	12 13	12 13
<b>East Coast, south—</b>																										
Madras . . . . .	10 13	10 13	10 13	10 13	11 6	11 6	12 10	12 10	17 3	17 3	17 3	17 3	25 11	25 11	25 11	25 11	25 11	25 11	25 11	25 11	25 11	25 11	92 6	92 6	12 5	12 5
Chingleput . . . . .	12 0	12 0	12 0	12 0	12 0	12 0	12 13	12 13	17 3	17 3	17 3	17 3	24 11	24 11	24 11	24 11	24 11	24 11	24 11	24 11	24 11	24 11	122 8	122 8	12 6	12 6
N. Arcot . . . . .	9 6	9 6	9 6	9 6	12 3	12 3	13 3	13 3	20 3	20 3	20 3	20 3	22 5	22 5	22 5	22 5	22 5	22 5	22 5	22 5	22 5	22 5	194 6	194 6	11 5	11 5
S. Arcot . . . . .	8 10	8 10	8 10	8 10	13 2	13 2	14 0	14 0	20 3	20 3	20 3	20 3	26 6	26 6	26 6	26 6	26 6	26 6	26 6	26 6	26 6	26 6	209 0	209 0	11 11	11 11
Tanjore . . . . .	8 13	8 13	8 13	8 13	13 11	13 11	14 0	14 0	23 3	23 3	23 3	23 3	26 6	26 6	26 6	26 6	26 6	26 6	26 6	26 6	26 6	26 6	166 3	166 3	12 6	12 6
Tichinopoly . . . . .	8 14	8 14	8 14	8 14	11 14	11 14	12 5	12 5	21 0	21 0	21 0	21 0	24 14	24 14	24 14	24 14	24 14	24 14	24 14	24 14	24 14	24 14	143 6	143 6	13 0	13 0
<b>Southern—</b>																										
Tinnevely . . . . .	9 3	9 14	9 3	9 14	11 2	11 2	11 10	11 10	17 0	17 0	17 0	17 0	24 13	24 13	24 13	24 13	24 13	24 13	24 13	24 13	24 13	24 13	53 5	53 5	14 6	14 6
Madura . . . . .	10 2	9 6	10 2	9 6	12 3	12 3	13 2	13 2	24 5	24 5	24 5	24 5	26 5	26 5	26 5	26 5	26 5	26 5	26 5	26 5	26 5	26 5	136 2	136 2	13 10	13 10
<b>Mysore—</b>																										
Mysore . . . . .	10 0	9 8	10 0	9 8	9 0	9 0	10 0	10 0	28 0	27 0	18 0	17 8	30 0	29 8	30 0	29 8	30 0	29 8	30 0	29 8	30 0	29 8	84 0	84 0	9 0	9 0
Bangalore . . . . .	10 0	10 8	10 0	10 8	10 0	9 8	10 0	9 8	23 0	23 0	18 0	17 8	32 0	31 0	32 0	31 0	32 0	31 0	32 0	31 0	32 0	31 0	84 0	84 0	9 4	9 4
Kolar . . . . .	10 8	10 8	10 8	10 8	10 0	10 0	12 8	12 8	...	...	...	...	37 0	37 0	37 0	37 0	37 0	37 0	37 0	37 0	37 0	37 0	144 0	144 0	9 8	9 8
Tumkur . . . . .	11 0	11 0	11 0	11 0	11 0	11 0	12 0	12 0	...	...	...	...	38 0	38 0	38 0	38 0	38 0	38 0	38 0	38 0	38 0	38 0	340 0	340 0	9 0	9 0
Hassan . . . . .	11 0	11 0	11 0	11 0	11 0	11 0	13 0	13 0	...	...	...	...	40 0	40 0	40 0	40 0	40 0	40 0	40 0	40 0	40 0	40 0	240 0	240 0	8 0	8 0
Kadur . . . . .	10 0	10 0	10 0	10 0	11 0	11 0	12 0	12 0	...	...	...	...	40 0	40 0	40 0	40 0	40 0	40 0	40 0	40 0	40 0	40 0	240 0	240 0	8 0	8 0
Shimoga . . . . .	12 10	11 9	12 10	11 9	11 9	11 9	14 11	14 11	33 10	31 8	32 0	32 0	48 5	44 2	48 5	44 2	48 5	44 2	48 5	44 2	48 5	44 2	480 0	480 0	8 6	8 6
Chitaldrug . . . . .	12 0	12 0	12 0	12 0	11 0	11 0	13 0	13 0	36 0	36 0	32 0	32 0	50 0	55 0	50 0	55 0	50 0	55 0	50 0	55 0	50 0	55 0	320 0	320 0	8 8	8 8
<b>Coorg—</b>																										
Coorg . . . . .	9 0	9 0	9 0	9 0	10 0	10 0	12 8	12 8	...	...	...	...	33 0	35 0	33 0	35 0	33 0	35 0	33 0	35 0	33 0	35 0	110 0	110 0	8 8	8 8
<b>Aden . . . . .</b>																										
Aden . . . . .	8 0	8 0	8 0	8 0	6 3	6 3	8 0	8 0	10 3	10 3	9 4	9 4	...	...	...	...	...	...	...	...	...	...	65 5	65 5	32 0	32 0

• Not sold.

DEPARTMENT OF FINANCE AND COMMERCE,  
(Statistical Branch).E. J. SINKINSON,  
Secretary to the Government of India.

GOVERNMENT OF INDIA.  
DEPARTMENT OF FINANCE AND COMMERCE.

*Comparative Statement of the Net Indian Sea and Land Customs Revenue (excluding Salt Revenue) for the first five months of the official year 1889-90, and of the  
eighteen preceding years.*  
(IN THOUSANDS OF RUPEES.)

FOR THE FIVE MONTHS, APRIL TO AUGUST.																										
YEAR.	BOMBAY.				SINDH.				MADRAS.				BURMA.				TOTAL BRITISH INDIA.				YEAR.					
	On Imports.	On Exports.	Total Revenue.	On Imports.	On Exports.	Total Revenue.	On Imports.	On Exports.	Total Revenue.	On Imports.	On Exports.	Total Revenue.	On Imports.	On Exports.	Total Revenue.	On Imports.	On Exports.	Total Revenue.								
1871-72	4.48	28.91	8.81	42.20	3.47	14.29	1.58	19.34	49	37	54	1.40	1.45	5.22	6.30	12.97	69	1.70	8.54	10.93	10.58	59.49	61.07	25.77	86.84	1871-72
1872-73	5.66	28.14	9.03	42.83	2.23	15.63	1.35	19.21	47	38	89	1.74	1.66	5.03	4.98	11.67	1.36	1.91	16.41	19.68	11.38	51.09	62.47	32.66	95.13	1872-73
1873-74	4.20	28.20	6.75	39.15	2.54	13.97	1.38	17.89	51	25	48	1.24	1.58	5.50	6.25	13.33	1.37	1.88	13.09	16.34	10.20	49.80	60.00	27.95	87.95	1873-74
1874-75	4.96	31.23	5.16	41.35	2.69	16.55	1.49	20.73	53	25	56	1.34	1.45	5.95	5.64	13.04	1.75	2.70	9.16	13.61	11.38	56.68	68.06	22.01	90.07	1874-75
1875-76	5.28	32.25	6.67	44.20	2.78	16.79	3.37	22.94	52	35	85	1.72	1.79	6.11	6.24	14.14	1.45	1.81	16.41	19.67	11.82	57.31	69.13	33.54	102.67	1875-76
1876-77	5.56	35.98	4.83	36.37	3.49	13.64	4.8	17.61	57	25	9	91	2.46	5.56	3.81	11.83	1.99	2.15	11.82	15.96	14.07	47.58	61.65	21.03	82.68	1876-77
1877-78	6.21	32.73	4.94	43.88	3.74	16.84	4.9	21.07	92	30	15	137	2.27	3.25	7.3	6.25	2.10	2.24	9.24	13.58	15.24	55.36	70.60	15.55	86.15	1877-78
1878-79	5.62	27.50	5.65	38.77	3.49	15.08	8.5	19.42	81	20	10	111	2.43	4.14	1.80	8.37	3.21	2.77	11.94	17.92	15.56	49.69	65.25	20.34	85.59	1878-79
1879-80	4.88	24.46	3.39	32.73	3.76	12.70	80	17.20	121	33	8	162	2.20	3.59	2.12	7.91	2.96	2.36	15.59	20.91	14.95	43.44	58.39	21.98	80.37	1879-80
1880-81	5.52	23.25	3.93	32.70	3.53	17.23	69	21.45	177	42	9	228	2.03	4.35	4.16	10.54	2.07	3.02	16.66	21.75	14.92	48.27	63.19	25.53	88.72	1880-81
1881-82	5.69	23.43	5.93	35.05	4.25	16.54	65	21.44	160	54	13	227	2.15	4.29	2.85	9.29	2.90	3.01	20.08	25.99	16.59	47.81	64.40	29.64	94.04	1881-82
1882-83	5.99	1	6.25	12.25	4.36	—98*	55	3.94	1.39	3	21	1.63	2.23	1	1.78	4.02	3.48	3	25.34	28.85	17.45	—90*	16.55	34.13	50.68	1882-83
1883-84	5.97	4	7.32	13.33	4.47	17	45	5.09	1.50	1	19	1.70	2.19	3	2.40	4.62	3.35	9	18.32	21.76	17.48	34	17.82	28.68	46.50	1883-84
1884-85	5.07	13	4.27	9.47	4.23	17	71	5.11	1.64	3	18	1.85	2.00	1	2.79	4.80	3.35	4	12.75	16.14	16.29	38	16.67	20.70	37.37	1884-85
1885-86	5.45	7	5.22	10.74	4.70	19	34	5.23	1.74	2	30	2.06	2.02	2	1.31	3.35	2.72	3	21.05	23.80	16.63	33	16.96	28.22	45.18	1885-86
1886-87	5.41	12	4.25	9.78	4.92	24	48	5.64	1.97	6	38	2.41	2.56	5	2.27	4.88	3.86	6	16.89	20.81	18.72	53	19.25	24.27	43.52	1886-87
1887-88	4.78	15	5.20	10.22	5.63	19	69	6.51	2.07	3	29	2.39	3.73	1	2.03	5.77	4.01	2	18.14	22.17	20.22	40	20.62	26.44	47.06	1887-88
1888-89	6.02	2.46	6.95	15.43	5.76	1.23	54	7.53	2.08	60	18	2.86	4.17	33	2.26	6.76	3.82	37	11.95	16.14	21.85	4.99	26.84	21.88	48.72	1888-89
1889-90	5.88	3.69	5.37	14.94	6.65	98	85	8.48	2.19	36	23	3.78	4.25	39	2.71	7.35	3.63	1.52	19.94	25.09	22.60	6.94	29.54	29.10	58.64	1889-90

\* The amount refunded is greater than the duty collected.

DEPARTMENT OF FINANCE AND COMMERCE,

STATISTICAL BRANCH;

Calcutta, 17th September, 1889.

E. J. SINKINSON,  
Secretary to the Government of India.

GOVERNMENT OF INDIA.  
PUBLIC WORKS DEPARTMENT.  
Civil Works—Irrigation.

STATEMENTS OF IRRIGATION OPERATIONS ON THE INUNDATION CANALS IN THE PUNJAB FOR THE RABI CROPS OF 1887-89, AND COMPARATIVE  
STATEMENT OF IRRIGATION AND RAINFALL IN THE DISTRICTS IRRIGATED BY THOSE CANALS FOR THE YEARS 1887-88 AND 1888-89.

STATEMENT No. I.  
IRRIGATION OPERATIONS OF THE RABI CROP OF 1888-89 ON INUNDATION CANALS.  
*Comparative Abstract of Irrigation and Rainfall in Canal Districts of the Punjab.*

Comparative Abstract of Irrigation and Rainfall																						
1	2	3	4		5	6		7	RAINFALL IN RABI MONTHS.												TOTAL.	
			AREA IRRIGATED.			COMPARISON WITH LAST CROP.			October.		November.		December.		January.		February.		March.			
			Area in acres.	Cultivated area in acres.		1888-89.	1887-88.		Increase.	Decrease.	1888.	1887.	1888.	1887.	1888.	1887.	1888.	1887.	1888.	1887.	1888.	1887-88.
DISTRICTS.	Montgomery (Lower Sohág and Pará Canal).	3,567,750	357,622	33,279	23,151	10,128	...	...	0'10	...	...	...	...	2'00	0'10	1'60	0'40	...	0'50	3'60	1'10	
	Mooltan (Sindhni Canal)	3,763,200	799,360	52,727	429,064	22,763	...	...	...	...	...	...	...	0'2	0'4	0'8	0'7	...	...	1'0	1'1	
	Gujránwála	1,637,125	529,270	20,727	5,982	14,745	...	...	...	...	...	...	...	3'0	1'0	1'5	0'7	0'6	...	5'2	2'3	
	Lahore	2,334,552	1,164,921	13,419	15,715	...	6 { 2,296	...	0'05	...	...	...	...	1'15	0'30	1'60	1'10	0'40	...	2'80	1'80	
	Montgomery	Given above.	Given	41,179	45,714	...	6 { 4,535	...	...	...	...	...	...	Given above.	...	...	...	...	...	...	...	
	Mooltan	Do.	Do.	157,614	142,934	14,680	...	...	...	...	...	...	...	0'3	0'1	0'6	1'3	0'1	0'1	1'1	1'5	
	Dera Gházi Khan	2,801,280	1,008,000	52,961	56,339	3,375	...	...	...	...	...	...	...	0'2	...	1'3	2'1	0'2	0'1	2'2	2'2	
	Muzaffargarh	2,007,819	397,529	150,455	146,769	3,686	...	...	...	...	...	...	...	...	0'4	...	1'2	1'5	...	1'8	1'5	
	Shahpur	3,031,700	585,491	9,766	6,463	3,403	...	...	0'1	...	...	...	...	...	1'3	0'8	1'7	1'0	1'2	5'6	3'1	
	TOTAL INUNDATION CANALS	19,143,726	4,842,193	532,127	472,928	69,405	10,205	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

(a) This is the correct acreage and differs from that shown in the return for Rabi Crop of 1887-88.  
(b) The decrease in the Upper Sulej Canals is due to short supply of water in the canals towards end of the season.

Acres.	
Total Area irrigated, 1887-88	472,928
" " " " " "	532,127
NET INCREASE	59,199

LAHORE.

The 13th August 1889.

J. W. OTTLEY, Major, R. E.,  
Offg. Joint-Secy-to Govt., Punjab, P. W. D., Irrigation Branch

STATEMENT NO. II.  
IRRIGATION OPERATIONS OF THE RABI CROP OF 1888-89 ON INUNDATION CANALS.  
*Statement in Acres of Crops irrigated in Canal Districts.*

DESCRIPTION OF CROPS.	Montgomery (Lower Sohag and Pera Canal.)	Mooltan (Sindh Canal.)	Gujranwála,	Lahore.	Montgomery.	Mooltan.	Dera Gházi Khan.	Muzaffar- garh.	Shahpur.	TOTAL.
Wheat . . . . .	25,693	39,773	13,123	4,798	20,643	112,909	43,209	113,154	9,420	382,722
Barley . . . . .	386	1,560	5,836	185	573	3,144	893	4,688	43	17,308
Mixed grain . . . . .	1,489	...	575	4,150	5,219	...	207	...	...	11,640
Others . . . . .	5,711	11,394	1,193	4,286	14,744	41,561	8,652	32,613	303	120,457
TOTAL RABI, 1888-89 . . . . .	33,279	52,727	20,727	13,419	41,179	157,614	52,961	150,455	9,766	532,127
TOTAL RABI, 1887-88 . . . . .	23,151	29,964	5,982	15,715	45,214	142,934	56,336	146,769	6,363	472,928

LAHORE,  
The 13th August 1889.

J. W. OTTLEY, Major, R. E.,  
Offg. Joint-Secy. to Govt., Punjab, P. W. D., Irrigation Branch.

STATEMENT NO. III.  
IRRIGATION OPERATIONS OF THE RABI CROP OF 1888-89 ON INUNDATION CANALS.  
*Statement in Acres of Crops irrigated in Canal Divisions.*

Description of Crops.	Lower Sohg and Para Canal.	Sidhnai Canal.	Chenab Canal.	Upper Sutlej Canals.	Lower Sutlej and Chenab Canals.	Indus Canals.	Muzaffargarh Canals.	Shahpur Canals.	Total.
Wheat . . . . .	25,693	39,773	13,123	25,441	112,909	43,209	113,154	9,420	382,722
Barley . . . . .	386	1,560	5,836	758	3,144	893	4,688	43	17,308
Mixed grain . . . . .	1,489	...	575	9,369	...	207	...	...	11,640
Others . . . . .	5,711	11,394	1,193	19,030	41,561	8,652	32,613	303	120,457
TOTAL RABI, 1888-89 . . . . .	33,279	52,727	20,727	54,598	157,614	52,961	150,455	9,766	532,127
TOTAL RABI, 1887-88 . . . . .	23,151	29,964	5,982	61,429	142,934	56,336	146,769	6,363	472,928

LAHORE,  
The 13th August 1889.

J. W. OTTLEY, Major, R.E.,  
Offg. Joint-Secy. to Govt., Punjab, P. W. D., Irrigation Branch.

## IRRIGATION OPERATIONS, 1888-89.

Comparative Statement of Irrigation and Rainfall for the years 1887-88 and 1888-89 in the districts of the Punjab irrigated by Inundation Canals.

AREA IRRIGATED.												RAINFALL.						
DISTRICTS.	POPULATION.	AREA IN ACRES.	CULTIVATED AREA IN ACRES.	KHARIF, 1888-89.				RABI, 1888-89.				WHOLE YEAR, 1888-89.		PERCENTAGE OF INCREASE OR DECREASE IN 1888-89.	1887-88.	1888-89.	PERCENTAGE OF INCREASE OR DECREASE IN 1888-89.	
				IN COMPARISON WITH 1887-88.		IN COMPARISON WITH 1887-88.		IN COMPARISON WITH 1887-88.		TOTAL IN ACRES.	IN COMPARISON WITH 1887-88.		TOTAL IN ACRES.					PERCENTAGE OF INCREASE OR DECREASE IN 1888-89.
				TOTAL IN ACRES.	DECREASE.	TOTAL IN ACRES.	DECREASE.	TOTAL IN ACRES.	DECREASE.									
											INCREASE.	DECREASE.						
Montgomery (Lower Sohág and Pára Canal.)	426,529	3,567,750	357,622	28,707	10,699	...	33,279	10,128	...	61,986	20,827	...	+50.60	11.00	10.90	-0.90		
Mooltan (Sihnai Canal)	551,964	3,763,200	799,360	47,989	2,669	...	52,727	22,763	...	100,716	25,432	...	+33.78	2.80	4.20	+50.00		
Gujránwala	616,892	1,637,425	529,270	26,917	22,045	...	20,727	14,745	...	47,644	36,790	...	+338.95	21.80	27.20	+24.77		
Lahore	924,106	2,334,552	1,164,921	18,270	1,691	...	13,419	...	2,296	31,689	...	605	-1.87	9.67	14.77	+52.74		
Montgomery	...	Given above	...	66,886	6,257	...	41,179	...	4,535	108,065	1,722	...	+1.62	Given above	...	...		
Mooltan	...	Ditto	...	167,619	12,958	...	157,614	14,680	...	325,233	27,638	...	+9.29	3.50	3.70	+6.00		
Dera Gházi Khan	363,346	2,801,280	1,008,000	148,820	14,680	...	52,961	...	3,375	201,781	11,305	...	+5.93	6.70	7.60	+13.43		
Muzaffargarh	338,605	2,007,819	397,529	139,372	5,814	...	150,455	3,686	...	289,827	9,500	...	+3.38	5.50	2.10	-61.82		
Shahpur	421,508	3,031,700	585,491	10,391	...	58	9,766	3,403	...	20,157	3,345	...	+19.90	7.00	13.90	+99.57		
TOTAL INUNDATION CANALS	3,642,950	19,143,726	4,842,193	654,971	76,813	58	532,127	69,405	10,206	1,187,098	136,559	605	+12.93	...	...	...		

Acres.	1,051,144	(as per Revenue Report.)
Area irrigated in 1887-88	1,187,008	
Ditto	1,187,008	
Net increase	135,054	

(as per Revenue Report.)

Area irrigated in 1887-88	1,051,144
Ditto	1,187,098
Net increase	135,954

LAHORE,

The 13th August 1889.

J. W. OTTLEY, Major, B.E.,

Offg. Joint-Secy. to Govt., Punjab, P. W. D., Irrigation Branch.

## GOVERNMENT OF INDIA.

## REVENUE AND AGRICULTURAL DEPARTMENT.

**Weather Review of India for the week ending at 8 a.m. on  
Monday, September 16th, 1889.**

The abnormal conditions which were reported last week have continued and intensified during the week under review. The mail steamer which crossed from Aden during the week experienced light south-westerly winds over the western half of the Arabian Sea and light north-easterly winds and fine weather over the eastern half. This shows that the Arabian Sea monsoon was very feeble and did not extend as far as the Coast of India. Hence, instead of the normal westerly and west-north-westerly winds which ordinarily prevail on the West Coast of the Peninsula at this season, variable breezes, generally from the northward and north-eastward, were reported, and the monsoon current was practically non-existent. Towards the close of the week there was some tendency towards change, a low pressure area passing up the Coast and drawing the wind to the southward as it did so. On the Bengal side the winds approximated more closely to the normal monsoon directions than they did on the Bombay side; but after the 13th the wind over the head of the Bay "backed" towards east, and the circulation over the Bay became cyclonic. These conditions have resulted in a more or less general break in the rains, for though showers have occurred in most parts of India except at some north-western stations, the rainfall has generally been slight and intermittent and not such as is associated with monsoon conditions.

The Chart of the 10th showed that a general barometric fall was in progress. Pressure was below the average over the Peninsula, above over the Central Provinces, and about the normal elsewhere. Readings were very uniform over the Peninsula, and gradients were generally slight for the time of year. Southerly winds prevailed over the Bay and easterly winds up the Gangetic plain, but elsewhere the directions were very abnormal. On the 11th pressure was still falling, but the changes were small and the general distribution was unchanged. The southerly wind at the head of the Bay was slightly stronger, but the easterly current over the Gangetic plain was less marked and the wind directions elsewhere were unaltered. Northerly winds still held on the West Coast. On the morning of the 12th there was very little change beyond an increasing deficiency of pressure on the West Coast and an increasing weakness of the monsoon currents all over India. The Chart of the 13th showed great uniformity of pressure and very light and variable winds. The distribution was more like that which at times prevails about the middle of October than that which is ordinarily experienced early in September. The winds around the Bay exhibited an indraught towards the centre of the Bay. The distribution of pressure on the 14th was very remarkable. There was a large deficiency of pressure over the West Coast and adjacent parts of the Arabian Sea, and at the same time there was apparently a large low pressure area over the Bay. The wind had shifted to the eastward over the head of the Bay and was light and variable elsewhere. The Chart of the 15th showed that the area of deficient pressure over the West Coast was working its way northward up the Coast and

that the depression over the Bay was developing slightly. The winds were very variable except along the foot of the hills, where they were steadily south-easterly. By the morning of the 16th the West Coast depression had advanced still further northward and the winds in that neighbourhood had become more normal in direction. Over the Bay there had occurred a considerable development of the depression, and a fairly well marked cyclonic circulation of the winds prevailed. The winds both around the Bay and elsewhere were very light in force, and numerous calms were reported from the inland stations.

*Temperature.*—The abnormal heat which set in last week with the decreasing rainfall has continued during the week under review and in several Provinces has intensified. Burma, the Punjab, Bombay, the Central Provinces, Sind, and Rajputana had excessive temperature on every day of the week, and in most other Provinces the majority of days were hotter than the average; but in Bengal, owing to the more constant rainfall, all days but one were cooler than the normal. The net results for the week exhibit an excess of temperature in all Provinces except Bengal. The greatest excess is in Bombay,  $3^{\circ}$ , followed by  $2^{\circ}$  in the Punjab and the Central Provinces. Maxima exceeding  $100^{\circ}$  were daily registered in nearly all parts of the Punjab as well as in Upper Sind. The following table shows the amount of the excess or defect of the mean average temperature of the different Provinces for the present and for the preceding week :

PROVINCES.	Difference of Mean Temperature of Last Week from Normal.	Difference of Mean Temperature of Present Week from Normal.
Burmah . . . . .	+ $0.7^{\circ}$	+ $1.6^{\circ}$
Bengal . . . . .	— $0.6^{\circ}$	— $0.5^{\circ}$
North-Western Provinces . . . . .	+ $0.1^{\circ}$	+ $0.2^{\circ}$
Punjab . . . . .	+ $1.6^{\circ}$	+ $2.0^{\circ}$
Bombay . . . . .	+ $1.9^{\circ}$	+ $2.9^{\circ}$
Central Provinces and Berar . . . . .	+ $1.0^{\circ}$	+ $1.9^{\circ}$
Guzerat and Central India . . . . .	— $0.1^{\circ}$	+ $1.7^{\circ}$
Sind and Rajputana . . . . .	— $0.3^{\circ}$	+ $1.3^{\circ}$
Madras . . . . .	— $0.4^{\circ}$	+ $0.1^{\circ}$

*Rain.*—The conditions affecting rainfall have during the present week been practically the same as those prevailing last week. An unsteady and intermittent monsoon has prevailed on the Bengal side and given rain practically only to Burma, Assam, and Lower Bengal. On the western side of India the monsoon current was non-existent during the greater part of the week and only appeared as a feeble burst of south-west winds quite at the close. Consequently any rain which has fallen in the west of the Peninsula has generally occurred in thundershowers of short duration. Showers have also occurred over Central and Northern India, but there has been no continued rain.

The following is a brief description of the daily distribution of rain.

On the 10th fairly heavy rain was reported from Karwar and from Bengal, Behar, and as far west as Lucknow, while showers had fallen over the west and centre of the Peninsula and the Central and North-Western Provinces. On the 11th showers were reported from the west of the Peninsula, the Central Provinces, Behar, and along the foot of the Himalayas, but had more or less ceased in Bengal. There were no large amounts. On the 12th the general distribution was similar to that of the preceding day, but the showers had ceased in the west of the Peninsula and increased in Bengal. The Chart of the 13th showed that

several heavy falls had occurred in Bengal, but elsewhere any rainfall was very light and scattered. On the 14th scattered showers, generally of small amount, were reported from all parts of the Indian region except the Circars and North-Western India. A similar distribution prevailed on the 15th. The Chart of the 16th showed that showers had fallen over most of the Coast districts, but at very few of the inland stations.

The table at the close of the summary exhibits very clearly the general deficiency of rain during the week. At thirty-six of the rainfall districts the amount received has been short of the average and at only fourteen has it been in excess. Two divisions in the Punjab, as well as Sind and Rajputana, were entirely without rain, and Orissa, the North-Western Provinces (West), and the Punjab (South and North-West), received only insignificant amounts.

The greater part of Burma has again received deficient rainfall, the only exception being Lower Burma, with an excess of 0·18 inch. In Bengal and Assam the distribution has been irregular. The Brahmaputra Valley, Central Bengal, and Behar have all received more than the normal amount, while Eastern Bengal, the Surma Valley, North Bengal, Orissa, and Chota Nagpur have had deficient rains. With the single exception of Oudh North, the whole of the North-Western Provinces and the Punjab have had deficient rain and in some districts none at all. The West Coast of the Peninsula, with the exception of the Konkan owing to the constant showers, has received excessive rain, and this excess has extended inland over the Deccan, Khandeish, and Berar. Guzerat, Kathiawar, and Sind, like North-Western India, have had very little rain, and in Rajputana there has been none. The Central Provinces and Central India exhibit a large deficiency, and the same is true of the east of the Peninsula. In the extreme south there have been some heavy falls and a considerable excess.

The maximum falls call for very little comment. Cherrapunji received only  $1\frac{1}{4}$  inches during the week, and though some largish amounts are reported from North Bengal and Behar, the falls in general over Burma, Bengal, and Assam are unimportant. In Upper India the amounts were all small. In Western India, Alipi was the only place which received more than 10 inches.

The final column of the table shows that the area over which the seasonal rainfall is deficient is increasing. The following are the divisions where the rainfall since the middle of May is deficient by more than 10 per cent.:—Lower and Central Burma, Eastern Bengal, Deltaic Bengal, North-West Provinces (West), Punjab, Central, Submontane and Hill districts, Khandeish, Sind and Rajputana West. The divisions of Deltaic Bengal and the North-Western Provinces (West) have come into the deficient list since last week. In all other parts of the Indian region the seasonal fall equals or nearly equals the average.

PROVINCE.	DIVISION.	RAINFALL DATA FOR WEEK ENDING SEPTEMBER 16TH, 1889.			RAINFALL DATA FROM MAY 13TH TO SEPTEMBER 16TH, 1889.		
		Average Actual Rainfall of Division.	Average Nor- mal Rainfall of Division.	Excess or Defect, in inches.	Average Actual Rainfall of Season to date.	Average Nor- mal Rainfall, May 13th to September 16th.	Excess or De- fect of (Season- al) Rainfall expressed as a per- centage.
		Inches.	Inches.	Inches.	Inches.	Inches.	Per cent.
BURMAH	Tenasserim	4'06	8'25	- 4'19	160'24	157'84	+ 2
	Lower Burmah	3'58	3'40	+ 0'18	63'02	80'18	- 21
	Central Burmah	1'76	2'46	- 0'70	49'13	64'06	- 23
	Upper Burmah	1'26	?	?	29'58	?	?
	Arakan	2'00	5'22	- 3'22	152'81	161'86	- 6
BENGAL AND ASSAM	Eastern Bengal	0'96	2'42	- 1'46	58'26	69'86	- 17
	Assam (Surma)	1'72	3'76	- 2'04	101'59	82'39	+ 23
	Do. (Brahmaputra)	2'45	2'03	+ 0'42	71'27	59'67	+ 19
	Deltaic Bengal	0'35	1'70	- 1'35	39'62	44'40	- 11
	Central Bengal	3'06	1'98	+ 1'08	43'25	43'51	- 1
	North Bengal	3'99	4'37	- 0'38	90'19	81'53	+ 11
	Orissa	0'28	2'04	- 2'66	38'23	41'09	- 7
	Chota Nagpur	2'01	2'03	- 0'02	40'15	41'79	- 4
	Behar (South)	2'35	1'46	+ 0'89	37'34	34'49	+ 9
	Do. (North)	5'37	2'09	+ 3'28	46'05	39'21	+ 17
NORTH - WESTERN PROVINCES AND ODDH.	North - Western Provinces (East).	1'37	2'03	- 0'66	38'59	29'94	+ 26
	Oudh (South)	1'04	2'25	- 1'21	38'18	30'20	+ 26
	Do. (North)	1'87	1'62	+ 0'25	37'96	32'30	+ 18
	North - Western Provinces (Central).	0'76	1'66	- 0'90	28'75	26'45	- 3
	North - Western Provinces (West).	0'14	1'38	- 1'24	21'47	24'48	- 12
	North - Western Provinces (Submontane).	1'35	1'96	- 0'61	46'24	36'30	+ 27
PUNJAB	Punjab (South)	0'01	0'41	- 0'40	11'34	11'79	- 4
	Do. (Central)	0	1'08	- 1'08	16'66	20'21	- 18
	Do. (Submontane)	0'21	0'83	- 0'62	20'21	23'28	- 13
	Do. (Hill Districts)	0'53	2'21	- 1'68	59'18	73'49	- 19
	Do. (North-West)	0'07	0'74	- 0'67	15'73	17'51	- 10
	Do. (West)	0	0'22	- 0'22	5'05	6'23	+ 7
BOMBAY AND MALA- BAR COAST DIS- TRICTS (MADRAS).	Malabar	4'06	2'06	+ 2'00	91'53	92'84	- 1
	Madras (South Central)	2'51	0'67	+ 1'84	28'69	13'23	+ 117
	Coorg	4'25	2'92	+ 1'33	87'01	87'52	- 1
	Mysore	1'96	1'18	+ 0'78	17'83	17'22	+ 4
	Konkan	1'77	3'29	- 1'52	111'18	89'29	+ 24
	Bombay Deccan	3'23	0'97	+ 2'26	22'60	24'80	- 9
	Hyderabad (North)	...	...	...	...	...	...
CENTRAL PROVINCES AND BERAH.	Khandeish	2'77	1'27	+ 1'50	15'69	19'24	- 18
	Berar	1'34	1'18	+ 0'16	31'41	28'24	+ 11
	Central Provinces (West)	1'70	2'43	- 0'73	32'39	35'78	- 9
	Ditto (Central)	0'95	2'29	- 1'34	47'11	45'42	+ 4
BOMBAY (NORTH)	Ditto (East)	0'69	2'38	- 1'69	48'91	44'20	+ 11
	Guzerat	0'55	2'92	- 2'37	34'56	36'48	- 5
	Kattiawar	0'88	1'58	- 0'70	24'06	25'10	- 2
RAJPUTANA AND CEN- TRAL INDIA.	Sind	0	0'28	- 0'28	1'55	4'31	- 64
	Central India (East)	1'01	1'88	- 0'87	36'32	32'04	+ 13
	Rajputana (East), Central India (West).	0	1'37	- 1'37	28'43	24'03	+ 18
	Rajputana (West)	0	0'63	- 0'63	8'49	12'04	- 29
MADRAS	East Coast (North)	0'46	1'40	- 0'94	26'35	21'11	+ 25
	Do. (North) (a)	1'20	2'18	- 0'98	30'20	31'53	- 4
	Hyderabad (South)	0'75	1'20	- 0'45	19'43	18'47	+ 5
	Madras (Central)	0'73	0'99	- 0'26	17'23	14'11	+ 22
	East Coast (Central)	0'71	0'89	- 0'18	15'58	15'53	0
	Ditto (South)	1'18	1'28	- 0'10	15'49	13'12	+ 18
	Madras (South)	2'36	0'38	+ 1'98	8'92	6'86	+ 30

W. L. DALLAS,

SIMLA, 19th September, 1889.

Assistant Meteorological Reporter to the  
Government of India.

E. C. BUCK,

Secretary to the Government of India.

## GOVERNMENT OF INDIA.

## REVENUE AND AGRICULTURAL DEPARTMENT.

## Weekly Report on the State of the Season and Prospects of the Crops.

**Madras.**—*For week ending 14th September.*—Rainfall good in all districts, except Nellore. Crops generally good, but withering in parts of South Arcot and Chingleput, and slightly damaged by excessive rain in Nilgiris. Prices rising in eight districts, falling in twelve, and stationary in others. Labourers employed on last day of week,—on Rushikulya works, 4,244; Gopalpur Canal, 1,436; Ghat Roads, 4,895; other minor works, 5,427. Number on village relief on 7th September, 46,983, including 28,772 children; fed in kitchens, 11,187, including 8,015 children. Imports into Ganjam during week by sea and land 800 tons. General prospects favourable.

**Bombay.**—*For week ending 18th September.*—Rain during week good throughout Deccan and Southern Mahratta Country and beneficial to crops; moderate or slight in other districts; more wanted in parts of Panch Mahals, Kaira, Broach, Surat, Khandesh, Nasik, Thana, Kolaba, Kathiawar, and Baroda. Standing crops damaged by rats, crabs, turtles, and locusts in parts of Karachi; by locusts in parts of Shikarpur; by rats, insects, locusts, drought, and blight in parts of Hyderabad; by blight and locusts in parts of Upper Sind Frontier; and by insects in parts of Kathiawar. Crops otherwise good, except in one taluka of Surat and two of Khandesh. Reaping of early crops commenced in Hyderabad. Fodder scarce in parts of Karachi, Poona, and Ahmednagar. Drinking water scarce in Upper Sind Frontier.

**Bengal.**—*For week ending 17th September.*—General and heavy rain fell during the week in North Bengal, Behar, and Chota Nagpur. In Orissa rain was almost entirely absent, while in East and South-West Bengal it was very light and partial: some heavy local showers are however reported from Beerbhoom, Bankoora, Moorshedabad, and Mymensingh. A break in the rains seems to be now prevalent in the whole Province. Transplanting of winter rice is almost finished but somewhat retarded for want of sufficient rain in places. In Western Bengal and in the Sadr subdivision of Balasore early jute, rice, and other autumn harvests are proceeding well. In Moorshedabad not much damage to crops has been reported, as more than 12 annas of the autumn rice was reaped before the floods; but there will be some suffering among cattle for want of fodder. In Jessore and Rajshahye some damage has been done by floods. In Rungpore the damage is not serious. Foodstocks continue to be sufficient, and prices are falling in the affected districts. In Muzaffarpur the number of persons in receipt of charity is increasing. In Chumparun relief is being given, but the distress is said to be diminishing. In Bhagulpore the relief works are closed.

**North-Western Provinces and Oudh.**—*For week ending 18th September.*—Weather generally seasonable. Rainfall heaviest in the eastern and lightest in the central districts. More rain wanted in Jhansi and Meerut. Crop prospects are everywhere favourable. Rice being harvested, yield good. Markets are well stocked, and prices fairly steady.

**Punjab.**—*For week ending 18th September.*—No rain, except a slight fall in the Lahore and Rawal Pindi districts. Prices rising in Rawal Pindi, falling in Shahpur, and stationary elsewhere. Ploughings for and sowings of *rabi* crops are in progress. Rain wanted in Hissar, Ferozepur, and Sialkot; it is also wanted for *kharif* crops in Umballa and Lahore. Prospects of standing crops are generally good, but only average in Peshawar owing to scarcity of water in the Bara. Crops are slightly damaged by locusts in Mooltan. Rice is suffering for want of rain in Umballa. Fodder is reported sufficient throughout the Province.

**Central Provinces.**—*For week ending 18th September.*—Weather generally clear with occasional heavy showers. *Kharif* crop in good condition. *Rabi* sowings commencing. Prices inclined to fall.

**Burma.**—*For week ending 14th September.*—In Lower Burma the rainfall for the week was light in Akyab, Hanthawaddy, Tharrawaddy, Bassein, Thayetmyo, Toungoo, and Mergui, fair in the remaining districts, and heavy in Thongwa. More rain is wanted in Tharrawaddy, where the crops are backward. In Thayetmyo and in Toungoo the crop prospect is on the whole good. In Bassein some damage took place owing to breaches of bund. In Upper Burma rain is much wanted in the following districts:—Mandalay, Shwebo, Myingyan, parts of Pakokku, Minbu (the Môn Valley), and Yamethin; in other districts the crop prospect is good. The price of paddy has risen slightly in Prome and Toungoo, and fallen slightly in Pegu, Henzada, Tavoy, and Mergui; elsewhere in Lower Burma there is no change. In Upper Burma the price has slightly risen in Yeu and fallen in Shwebo and Pakokku; in other districts there are no fluctuations. The food-supply is sufficient throughout the Province.

**Assam.**—*For week ending 18th September.*—Rainfall light; more rain wanted in Sylhet. Early rice is still being harvested and winter rice transplanted. Crops generally are doing well. Tea is suffering from blight in Cachar, and some damage has been done to crops in Sibsagar by insects.

**Mysore and Coorg.**—*For week ending 18th September.*—Rainfall good throughout the State of Mysore. Standing crops generally good, but more rain is needed for wet crop in Shikarpur in the Shimoga district. Sowing operations still continue in parts. No material change in prices.

Good rain in Coorg. Season favourable for standing crops. Prices slightly fallen.

**Berar and Hyderabad.**—*For week ending 18th September.*—Average rainfall 2·66 inches in Berar. Crops in good condition. Weeding continues. Prices of food-grains high in Akola and low in Amraoti district. Pasturage sufficient.

Rainfall during week at Hyderabad, 2·4; total since 1st January, 26·50. Weeding of *kharif* and *rabi* crops completed. Tanks received sufficient water. Fodder for cattle plentiful. Prices stationary.

**Central India.**—*For week ending 18th September.*—Rainfall slight but general, except in Goona. Crops generally good; no further damage from locusts in Bhopawar. Prices still high in Goona.

**Rajputana.**—*For week ending 18th September.*—Slight rain in Abu, Kherwara, and Bickaneer. Standing crops damaged by locusts in parts of Sirohi and Marwar. Agricultural stock good. Pasturage or fodder sufficient. Prices steady generally.

**Nepal.**—*For week ending 12th September.*—Good rain. Weather cool and rainy. Prospects very good.

E. C. BUCK,  
Secretary to the Government of India.

GOVERNMENT OF INDIA.  
PUBLIC WORKS DEPARTMENT.  
RAILWAY TRAFFIC.

No. XXI. OF 1889-90.

## APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used as far as possible.

Latest Return received.	RAILWAYS.	WEEK ENDING 25TH AUGUST, 1888.			WEEK ENDING 24TH AUGUST, 1889.			TOTAL RECEIPTS FROM 1ST APRIL TO 25TH AUGUST, 1888.		TOTAL RECEIPTS FROM 1ST APRIL TO 24TH AUGUST, 1889.		Total increase in 1889-90.	Total decrease in 1889-90.
		Total mean length open.	Receipts.		Total mean length open.	Receipts.		Total.	Per mile open per week.	Total.	Per mile open per week.		
			Total.	Per mile open.		Total.	Per mile open.						
			Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.
State Lines worked by Companies.													
31st August, 1889	East Indian	1,514	6,05,003	400	1,514	6,19,951	409	1,71,86,187	541	1,75,64,871	553	3,78,684	...
31st ditto	Patna-Gya.	57	5,566	97	57	5,849	102	1,70,131	142	1,74,303	145	4,172	...
31st ditto	Dildarnagar-Ghazipur	12	621	52	12	714	59	20,900	83	19,129	70	...	1,771
31st August, 1889	Sindia	75	4,458	59	...	(a)	...	1,54,223	98	(a)	...	...	1,54,223
31st ditto	Rajputana-Malwa	1,664	2,52,546	152	1,664	2,36,000	142	72,21,540	207	82,11,095	237	9,89,555	...
31st ditto	Bengal-Nagpur (b)	186	20,522	110	305	(c) 20,166	66	6,61,428	169	(c) 7,56,500	121	95,072	...
31st ditto	Southern Mahratta (d)	850	60,152	71	857	66,012	77	16,02,994	90	17,43,437	97	1,40,533	...
31st ditto	Do. Mysore Section	140	10,532	75	296	18,062	61	2,16,897	74	2,97,921	63	81,024	...
31st ditto	Indian Midland	136	7,121	52	746	(e) 40,335	54	3,02,509	100	(e) 11,57,820	86	8,55,311	...
31st ditto	Villupuram-Dharma- veram (Nellore Branch)	83	6,144	74	83	5,147	62	1,02,500	59	1,01,309	59	...	1,191
24th ditto	Bareilly-Pilibhit.	36	1,969	55	36	2,339	65	32,365	45	40,676	56	8,311	...
	TOTAL	4,753	9,74,634	205	5,570	10,14,575	182	2,76,71,584	277	3,00,67,061	267	23,95,477	...
State Lines worked by Government.													
31st August, 1889	North Western (f)	2,469	4,47,224	181	2,386	4,36,666	183	96,07,446	185	1,08,38,544	218	12,31,098	...
24th ditto	Oudh and Rohilkhand	692	95,068	137	692	1,13,157	104	28,73,444	197	32,15,893	221	3,42,449	...
24th ditto	Bengal Central	125	10,232	82	125	15,490	124	2,44,920	93	2,83,619	108	38,699	...
31st ditto	Wardha Coal	45	15,639	347	45	8,806	196	2,98,416	316	3,23,951	344	24,035	...
24th ditto	Eastern Bengal	673	1,89,340	281	747	2,52,930	337	33,32,562	236	36,49,741	248	3,17,179	...
31st ditto	Nalhati	27	1,786	66	27	1,840	68	40,532	74	39,151	72	...	1,381
31st ditto	Tirhoot	259	20,963	81	273	37,348	137	6,87,249	133	7,93,594	145	1,06,345	...
24th ditto	Lucknow-Sitapur	105	4,172	40	105	5,451	52	1,05,121	48	1,38,454	63	33,333	...
24th ditto	Silgram	25	1,491	60	25	1,404	56	24,075	46	25,096	42	1,021	...
24th ditto	Cherra-Companyganj.	7	198	28	7	187	27	1,574	10	2,471	16	897	...
24th ditto	Burma (g)	392	37,119	95	553	65,685	119	11,82,773	148	17,95,885	156	6,13,112	...
	TOTAL	4,819	8,23,232	171	4,985	9,38,064	188	1,83,98,112	182	2,11,05,499	205	27,07,387	...
Lines worked by Guaranteed Companies.													
31st August, 1889	Madras	840	1,47,302	175	840	1,71,085	204	34,23,271	194	37,71,106	215	3,47,835	...
31st ditto	South Indian	654	1,07,474	164	654	1,08,024	166	22,70,834	165	23,82,045	175	1,11,211	...
31st ditto	Great Indian Peninsula	1,497	(h) 5,55,313	371	1,440	(i) 3,86,110	268	1,79,41,136	569	1,37,42,604	457	...	41,98,532
31st ditto	Bombay, Baroda and Central India (j)	461	1,52,024	341	461	1,45,000	315	51,04,288	527	54,39,569	565	3,26,281	...
	TOTAL	3,452	9,67,113	280	3,395	8,10,819	239	2,87,39,529	396	2,53,26,324	358	...	34,13,205
GRAND TOTAL (GUARANTEED AND STATE)													
		13,024	27,64,979	212	13,950	27,63,458	198	7,48,09,225	274	7,64,98,884	267	16,89,659	...
GROSS ESTIMATED EXPENSES													
		...	...	...	...	...	...	3,90,56,873	143	3,97,95,600	139	7,38,727	...
NET RECEIPTS													
		...	...	...	...	...	...	3,57,52,352	131	3,67,03,284	128	9,50,932	...
Assisted Companies.													
31st August, 1889	Tarakeshwar	22	3,204	146	22	4,446	202	1,19,490	256	1,21,052	259	1,562	...
17th ditto	Dibru-Sadiya	...	...	...	...	(k)	...	(l) 1,72,101	110	(m) 1,94,968	125	22,807	...
31st ditto	Bengal and North-Western	376	35,095	93	376	36,540	97	10,44,136	132	11,04,101	141	59,965	...
24th ditto	Rohilkhand-Kumaun	67	4,753	71	67	5,352	80	1,51,527	113	1,61,190	120	9,663	...
	TOTAL	465	43,052	93	465	46,338	100	14,87,314	130	15,81,311	140	93,997	...
Native States.													
31st August, 1889	His Highness the Nizam's Guaranteed	310	27,931	90	354	43,022	122	6,34,099	107	8,66,146	117	2,32,047	...
31st ditto	His Highness the Gaekwar's	59	1,390	24	59	1,520	26	55,783	45	54,956	45	...	827
31st ditto	His Highness the Gaekwar's Verangam	21	512	24	27	630	23	19,635	45	23,715	42	4,080	...
31st ditto	Mehsana-Vadnagar	193	11,439	59	261	15,129	58	4,17,578	103	5,23,115	105	1,55,537	...
31st ditto	Bhavnagar-Gondal	68	1,557	23	68	2,348	35	78,996	55	87,691	61	8,695	...
31st ditto	Junagarh-Portbandar	124	3,666	30	124	4,300	35	1,52,000	58	1,40,339	54	...	11,661
	TOTAL	775	46,495	60	893	66,949	75	13,58,091	87	17,45,962	94	3,87,871	...

(a) Included with Indian Midland Railway.

(b) Includes the Katni-Umaria Branch.

(c) Includes the Sanctoria Coal Section of the Bengal-Nagpur Railway.

(d) Includes the Bellary-Kistna State Railway.

(e) Includes the Sindia and Bhopal-Itarsi State Railways.

(f) Includes the Amritsar-Pathankot and Rajpura-Bhatinda State Railways.

(g) Includes the Toungoo-Mandalay extension.

(h) Includes the Dhond-Manmad, Khamsaon, Amraoti, and Bhopal-Itarsi State Railways.

(i) Includes the Dhond-Manmad, Khamsaon, and Amraoti State Railways.

(j) Includes the Patri Branch.

(k) Return not received.

(l) Total receipts from 1st April to 18th August, 1888.

(m) Total receipts from 1st April to 17th August, 1889.

M. C. BRACKENBURY, Major, R.E.,  
Under-Secretary.

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SUPPLEMENT TO  
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No. 39.}

SIMLA, SATURDAY, SEPTEMBER 28, 1889.

**OFFICIAL PAPERS.**

*A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor-General will in future be published in PART VI. of the GAZETTE.*

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GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

**Weather Review of India for the week ending at 8 a.m. on  
Monday, September 23rd, 1889.**

Strongly marked contrasts of weather have prevailed over India during the past week. The mail steamer which crossed from Aden during the week experienced light westerly winds and sultry weather from Aden to Socotra and a light monsoon and heavy swell but no wind from Socotra to near Bombay. Near Bombay the weather was showery, with west-south-west winds and a westerly swell. From this it appears that for the present the Arabian Sea monsoon shows no sign of increasing strength, and the winds along the West Coast of India have been light and variable. The weather has not however on that account been dry. Showers, often of very considerable amount, *viz.*, over the east of the Peninsula, the Bay, Burma, Bengal, Assam, and to a limited extent the Central and North-West Provinces, the weather has been rough, squally and unsettled. The depression which was forming over the Bay at the time of the conclusion of the previous summary developed into a storm of very considerable intensity. The centre crossed the Coast between Vizagapatam and Gopalpore and advanced into the Central Provinces. It then moved northward and struck the Himalayas to the north of Gorakhpur. All over the area affected by this storm the weather has been squally and unsettled, with general and in places heavy rain. The weather in North-Western India has been in strong contrast to that prevailing over Eastern and Southern India. The winds have been light, the weather fine, and the temperature high.

On the morning of the 17th a well marked low pressure area prevailed over the centre and north of the Bay and extended westward across the Circars and Orissa, as far as the east of the Central Provinces. Within this large area of low pressure and probably in lat. 18° 30' and long. 89° a storm centre existed. Pressure was highest in the south-east of the Bay and moderate gradients existed

in that quarter, but elsewhere readings were very uniform. A cyclonic circulation of the winds prevailed around the Bay, with a strong indraught from the southward. Except around the Bay, the winds were generally light and variable. By the morning of the 18th the cyclonic storm in the Bay had approached the Coast between Vizagapatam and Gopalpore, and the barometer in that neighbourhood was two-tenths below the normal average. Cyclonic winds prevailed over the whole of the Bay, Bengal, the Central Provinces, Hyderabad and Southern India, of which those near the storm centre were strong. The centre crossed the Coast some time in the afternoon of the 18th and at 8 A.M. on the 19th lay a little to the west of Gopalpore. The depression proved to be a deep one, and the barometer at the centre before crossing the Coast probably fell to 29.00". The cyclonic circulation around the storm extended over a very large part of India, and the winds were very strong over Ganjam and the centre and south of the Bay. Pressure remained highest in the south-east of the Bay, but was at the same time relatively high in the north-west of the Punjab. During the twenty-four hours succeeding 8 A.M. on the 19th the storm travelled very slowly, and the Chart of the 20th showed the centre a little to the south of Raipur. The storm was apparently slowly filling up, but its effect on the winds was still extensive, the cyclonic circulation around the centre still extending over the greater part of the country. Over the head of the Bay and in the neighbourhood of the cyclone the wind was blowing strongly. The Chart of the 21st showed that pressure had increased everywhere. The cyclonic storm had filled up to some extent and was commencing a northerly movement. The circulation of the winds around the centre had undergone very little change. At 8 A.M. on the 22nd the centre of disturbance lay immediately to the south of Gorakhpur, the storm having moved quickly northward during the previous twenty-four hours. The winds were cyclonic in the neighbourhood of the storm centre, but the large cyclonic circulation which had previously obtained had to a large extent broken up. The wind force was still high at the head of the Bay. By the morning of the 23rd the disturbance had disappeared and pressure, with some irregularities, decreased from a high pressure area in the south of the Bay to a low pressure area in Sind, the difference being 0.3". The winds were still strong at the head of the Bay, but the cyclonic movements had practically disappeared.

*Temperature* has undergone large variations during the week. At first, when the rainfall was generally light and scattered, the heat was above the average almost everywhere, but with the advent of the storm on the 19th a fall of temperature commenced in Burma, Bengal and Madras, which subsequently extended to the greater part of India except the west and north-west. The Punjab, Bombay, the Central Provinces, Central India, Sind and Rajputana were hotter than usual on every day of the week, but in the other Provinces there were considerable variations from day to day, and in Madras and Bengal only on two days in the week was the weather warmer than usual. The net results for the week exhibit an excess of  $3\frac{1}{2}^{\circ}$  in Sind and Rajputana, of  $3^{\circ}$  in Guzerat and Central India, and of  $2^{\circ}$  in Bombay and the Central Provinces, while Madras, Bengal and Burma show a slight defect and the Punjab and North-Western Provinces a slight excess. Maxima exceeding  $100^{\circ}$  were reported from several stations in North-Western India throughout the week, the highest reading being  $108.7^{\circ}$  at Hyderabad (Sind) on the 21st.

The following table shows the amount of the excess or defect of the mean average temperature of the different Provinces for the present and for the preceding week :

PROVINCES.	Difference of Mean Temperature of Last Week from Normal.	Difference of Mean Temperature of Present Week from Normal.
Burmah	+ 1.6°	— 0.1°
Bengal	— 0.5°	— 0.9°
North-Western Provinces	+ 0.2°	+ 0.2°
Punjab	+ 2.0°	+ 1.0°
Bombay	+ 2.9°	+ 2.0°
Central Provinces and Berar	+ 1.9°	+ 2.2°
Guzerat and Central India	+ 1.7°	+ 2.9°
Sind and Rajputana	+ 1.3°	+ 3.5°
Madras	+ 0.1°	— 0.7°

*Rain.*—The conditions affecting the rainfall of the week have been detailed above. Briefly, the rain was due over the Peninsula to constant showers, and over the Bay, Burma, Bengal and the east of the Central and North-West Provinces to a travelling storm of considerable intensity. North-Western India, being beyond the sphere of the storm and unaffected by the feeble monsoons prevailing, had fine dry weather throughout.

The following is a brief description of the daily distribution of rainfall :

On the 17th rain had fallen generally over the Peninsula, around the Bay and in Upper Burma and Assam, and a few showers had occurred in Lower Bengal and along the foot of the Himalayas. The heaviest falls were reported from Lower Bengal and the Bombay Deccan. On the 18th rain was fairly general except in the central parts of the country and the north-west. The heaviest amounts were now reported from the Circars. On the 19th rain was confined to the Peninsula, the Bay, Burma, Assam and Lower Bengal, and there was none over Central or North-Western India. Similar conditions prevailed on the 20th except that rain had commenced at some central stations. On the 21st rain ceased in the east, centre and west (north of Goa) of the Peninsula. On the 22nd excessively heavy rain fell in the east of the North-Western Provinces and general rain over Bengal and the Central Provinces. In the Peninsula the rainfall was confined to the west and south, and on the 23rd rain was falling except in North-Western and Central India.

The table at the close of the summary shows that at thirty of the rainfall districts the amount received during the week has been in excess and at twenty in defect of the average. Sind is the only district which has received no rain whatever during the week, but at several other districts in the north-west and centre of India the week's fall has been small and unimportant.

The whole of Burma, except the Tenasserim division, has received more than the average amount of rain. So also has the whole of Bengal and Assam, the east of the North-Western Provinces, Oudh and the submontane district of the North-West Provinces. The east and centre of the Central Provinces have also received more than the usual amount of rain. The whole of this region was influenced by the cyclonic storm noticed above, and the general excess of rain which has occurred over these districts is more or less connected with the action and course of this storm. Over the whole of north-western and central parts of India outside the sphere of action of the storm, *vis.*, the west and centre of the North-Western Provinces, the whole of the Punjab, Rajputana, the west of the Central Provinces, Guzerat and Sind, the rainfall of the week was largely deficient or, in the case of Sind, altogether wanting. The monsoon on the West Coast was as explained above exceedingly feeble ; but there appears to have been a certain amount of indraught across the Peninsula, as the whole of the West Coast districts, the Bombay Deccan, Hyderabad South and some Madras districts received heavier rain than usual. Whatever current there was did not however extend northward, so that Berar and Khandesh received a deficient amount.

The returns of maximum falls show that the heaviest rainfall tended towards East and North Bengal, Behar and the submontane districts of the North-Western Provinces. Cherrapunji received 27 inches, one station in Tipperah 13 inches, one station in Rungpore 11 inches, one station in Durbhunga 15½ inches, and one station in Gorakhpur 13½ inches. In North-Western India there were no heavy falls. In Malabar and Madras South Central some falls of about 15 inches were measured, while in North Kanara Kumpta received 17 inches and in Kolhapur Banda received 11½ inches. In the central parts of the country the maximum falls are unimportant. The heaviest fall in any part of India is 22½ inches, which occurred at Ankapalli in the Vizagapatam district.

The concluding column of the table shows the state of the seasonal rainfall. The following are the divisions in which the total rainfall since the middle of May is when compared with the average deficient by more than 10 per cent. :—Lower and Central Burma, Eastern Bengal, North-Western Provinces (West), Punjab, Central, Submontane, Hill and north-west divisions, Khandesh, Guzerat, Sind and Rajputana (West). Deltaic Bengal has hence disappeared from the deficient list since last week, while Guzerat and the north-west of the Punjab have on the contrary come into it. In all other parts of India the seasonal fall is satisfactory.

PROVINCE.	DIVISION.	RAINFALL DATA FOR WEEK ENDING SEPTEMBER 23RD, 1889.			RAINFALL DATA FROM MAY 13TH TO SEPTEMBER 23RD, 1889.		
		Average Actual Rainfall of Division.	Average Nor- mal Rainfall of Division.	Excess or Defect, in Inches.	Average Actual Rainfall of Season to date.	Average Nor- mal Rainfall, May 13th to September 23rd.	Excess or De- fect of (Season- al) Rainfall expressed as a per- centage.
		Inches.	Inches.	Inches.	Inches.	Inches.	Per cent.
BURMAH . . .	Tenasserim . . . . .	5'42	7'46	- 2'04	165'66	165'29	0
	Lower Burmah . . . . .	4'42	2'84	+ 1'58	67'44	83'02	- 19
	Central Burmah . . . . .	2'56	2'30	+ 0'26	51'70	66'36	- 22
	Upper Burmah . . . . .	3'37	?	?	32'68	?	?
	Arakan . . . . .	8'30	6'60	+ 1'70	163'12	168'46	- 3
BENGAL AND ASSAM . . .	Eastern Bengal . . . . .	5'24	3'16	+ 2'08	63'50	73'02	- 13
	Assam (Surma) . . . . .	8'72	3'78	+ 4'94	110'31	86'17	+ 27
	Do. (Brahmaputra) . . . . .	3'73	2'46	+ 1'27	75'00	62'13	+ 21
	Deltaic Bengal . . . . .	2'49	2'13	+ 0'36	42'12	46'65	- 10
	Central Bengal . . . . .	4'23	2'28	+ 1'95	47'48	45'80	+ 4
	North Bengal . . . . .	5'10	4'48	+ 0'62	95'30	86'01	+ 11
	Orissa . . . . .	2'59	2'54	+ 0'05	40'86	43'64	- 6
	Chota Nagpur . . . . .	2'07	1'74	+ 0'33	42'22	43'53	- 3
	Behar (South) . . . . .	2'45	1'44	+ 1'01	39'78	35'93	+ 11
	Do. (North) . . . . .	5'17	1'96	+ 3'21	51'22	41'17	+ 24
NORTH - WESTERN PROVINCES AND ODDH. . . . .	North - Western Provinces (East). . . . .	5'01	1'79	+ 3'22	43'60	31'73	+ 37
	Oudh (South) . . . . .	2'05	1'91	+ 0'14	40'23	32'11	+ 25
	Do. (North) . . . . .	4'10	2'16	+ 1'94	42'11	34'46	+ 22
	North - Western Provinces (Central). . . . .	0'76	1'25	- 0'49	26'51	27'70	- 4
	North - Western Provinces (West). . . . .	0'14	0'84	- 0'70	21'61	25'32	- 15
	North - Western Provinces (Submontane). . . . .	2'20	1'72	+ 0'48	48'45	38'02	+ 27
PUNJAB . . . . .	Punjab (South) . . . . .	0'09	0'29	- 0'20	11'43	12'07	- 5
	Do. (Central) . . . . .	0'03	0'63	- 0'60	16'09	20'84	- 20
	Do. (Submontane) . . . . .	0'28	0'78	- 0'50	20'49	24'06	- 15
	Do. (Hill Districts) . . . . .	0'05	1'94	- 1'89	59'23	75'42	- 22
	Do. (North-West) . . . . .	0'22	0'59	- 0'37	15'95	18'10	- 12
	Do. (West) . . . . .	0'06	0'18	- 0'12	6'71	6'41	+ 5
BOMBAY AND MALA- BAR COAST DIS- TRICTS (MADRAS). . . . .	Malabar . . . . .	7'16	2'12	+ 5'04	98'73	94'96	+ 4
	Madras (South Central) . . . . .	1'78	0'96	+ 0'82	30'47	14'19	+ 115
	Coorg . . . . .	6'77	2'71	+ 4'06	93'78	90'23	+ 4
	Mysore . . . . .	1'05	0'94	+ 0'11	18'88	18'16	+ 4
	Konkan . . . . .	6'47	2'89	+ 3'58	117'66	92'18	+ 28
	Bombay Deccan . . . . .	2'38	1'03	+ 1'35	24'98	25'83	- 3
	Hyderabad (North) . . . . .	...	...	...	...	...	...
	Khandeish . . . . .	1'27	1'42	- 0'15	10'60	14'56	- 27
CENTRAL PROVINCES AND BERAR. . . . .	Berar . . . . .	0'17	1'71	- 1'54	29'55	28'76	+ 3
	Central Provinces (West) . . . . .	1'10	1'49	- 0'39	35'58	39'08	- 9
	Ditto (Central) . . . . .	1'90	1'61	+ 0'29	40'00	47'60	+ 4
	Ditto (East) . . . . .	3'03	1'92	+ 1'11	51'95	40'12	+ 13
BOMBAY (NORTH) . . . . .	Guzerat . . . . .	0'93	1'88	- 0'95	30'94	37'85	- 18
	Kathiawar . . . . .	1'19	0'98	+ 0'21	25'85	20'08	- 1
	Sind . . . . .	0	0'08	- 0'08	1'55	4'39	- 65
RAJPUTANA AND CEN- TRAL INDIA. . . . .	Central India (East) . . . . .	0'76	1'12	- 0'36	37'13	33'02	+ 12
	Rajputana (East), Central India (West). . . . .	0'03	0'83	- 0'80	28'40	24'87	+ 14
	Rajputana (West) . . . . .	0'12	0'64	- 0'52	8'61	12'08	- 32
MADRAS . . . . .	East Coast (North) . . . . .	5'06	1'66	+ 3'40	31'41	22'77	+ 38
	Do. (North) (a) . . . . .	2'45	2'86	- 0'41	32'05	34'38	- 5
	Hyderabad (South) . . . . .	3'43	1'15	+ 2'28	22'80	19'02	+ 17
	Madras (Central) . . . . .	2'71	1'09	+ 1'62	19'94	15'20	+ 31
	East Coast (Central) . . . . .	1'40	0'97	+ 0'43	16'97	10'51	+ 3
	Ditto (South) . . . . .	1'03	1'04	- 0'01	16'52	14'16	+ 17
	Madras (South) . . . . .	0'20	0'63	- 0'37	9'17	7'49	+ 22

W. L. DALLAS,

SIMLA, 26th September, 1889.

Assistant Meteorological Reporter to the  
Government of India.

E. C. BUCK,

Secretary to the Government of India.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

**Weekly Report on the State of the Season and Prospects of the Crops.**

**Madras.**—*For week ending 21st September.*—Rainfall general; slight in Nellore and Salem. Crops generally good, but damaged by excessive rain in parts of the Nilgiris; withering from want of rain or water in parts of Chingleput and South Arcot. Prices rising in four districts, stationary in six, and falling in others. Labourers employed last day of week,—on Rushikulya works, 3,604; Gopalpur Canal, 1,099; Ghat Roads, 4,003; other minor works, 7,022. On village relief on 14th September, 42,518, including 25,649 children; fed in kitchens, 11,158, including 8,010 children. Imports into Ganjam during week by sea and land 589 tons. General prospects favourable.

**Bombay.**—*For week ending 25th September.*—Rain during week throughout Presidency Proper and standing crops benefited by it; total fall still insufficient in parts of Guzerat, Khandesh, Thana and Colaba. Standing crops damaged by locusts, crabs and rats in parts of Karachi; and by locusts in parts of Shikarpur, Hyderabad, Upper Sind Frontier and Ahmedabad; crops otherwise good. Reaping of early and sowing of late crops progressing in several districts. Probable outturn of early crops in Baroda from 14 to 16 annas. Fodder scarce in parts of Poona and Dharwar.

**Bengal.**—*For week ending 24th September.*—Rainfall has been general and in the northern and eastern districts fairly heavy. Prospects of winter rice are generally favourable, but have suffered from floods in places in Central and Northern Bengal and from drought in parts of Burdwan, Hooghly and Balasore. In Moorshedabad the damage from floods in the low lands of the Lalbagh subdivision is considerable. Harvesting of early rice and jute is still proceeding and the outturn is reported to be fair in several districts. The *bhadoi* harvest in Behar and Chota Nagpur is yielding a good outturn except in the flooded tracts in Behar. Foodstocks are sufficient. In the affected districts in Chumparun and Muzaffarpur loans and gratuitous relief are still being given. In Midnapur the number of persons receiving charity is sixty. In the Sonthal Pergunnahs relief works are closed.

**North-Western Provinces and Oudh.**—*For week ending 25th September.*—Heavy rain in some of the eastern districts has done injury to the standing crops and somewhat retarded ploughing for the *rabi*; elsewhere the rainfall has been light. Rice and the earlier *kharif* crops are being harvested, and *rabi* ploughing and sowing has commenced. Prospects generally are good. Markets are well supplied, and in most districts prices are stationary.

**Punjab.**—*For week ending 25th September.*—Rainfall slight in Jullundur, Ferozepore, Lahore, Rawalpindi, and Shahpur districts. Prices rising in Rawalpindi, falling in Shahpur, and stationary elsewhere. Harvesting of *kharif* crops commenced in certain districts. Ploughing for *rabi* in progress. More rain wanted in most districts. *Kharif* crops are reported to be in good condition except in Hissar and Umballa, where they are withering for want of rain. Outturn of cotton is good in Peshawar. Crops are slightly damaged by locusts in Leiah tahsil, Dera Ismail Khan district. Fodder sufficient throughout the Province.

**Central Provinces.**—*For week ending 25th September.*—Weather generally clear with occasional showers. Rainfall sufficient except in Sihora and Murwara tahsils of the Jubbulpore district. Prospects of the *kharif* crops continue very favourable. Land being prepared for *rabi* sowings, and sowings of *til* commencing in places. Prices generally steady and falling in some districts.

**Burma.**—*For week ending 21st September.*—The rainfall in all districts of Lower Burma was fairly heavy, with the exception of Prome and Tharrawaddy, where the fall was light. The crop prospect is generally good in Lower Burma. More rain is wanted in Mandalay, Shwebo, in part of the Myinmu subdivision of Sagaing, Minbu and Yamethin. The crop prospect is fair. The price of paddy in Lower Burma has fallen slightly in Prome, Moulmein and Tounghoo, and risen slightly in Henzada and Thayetmyo. In other districts the price remains unchanged in Upper Burma. The price has fallen from Rs. 95 to Rs. 65 per 100 baskets in Mandalay; in all other districts there are no fluctuations. The foodsupply is sufficient throughout the Province.

**Assam.**—*For week ending 25th September.*—Rainfall varies from 0·90 inches in Darrang to 20·17 inches in Garo Hills, where damage has been done to crops. Reaping of early rice and transplanting of winter rice almost finished. Weather cold and wet for tea. Blight less prevalent in Cachar.

**Mysore and Coorg.**—*For week ending 25th September.*—Rain has fallen more or less throughout the State of Mysore. More rain is wanted for wet crops in Shikarpur of the Shimoga district. In parts of the Tumkur and Kadur districts dry crops somewhat damaged by excessive rain, otherwise crops are in good condition and prospects are favourable. Prices slightly fallen in Bangalore and Shimoga districts.

Rainfall 8·26 inches in Coorg. Transplanting of rice completed except in parts of Kiggatnad taluk. Standing crops promise well.

**Berar and Hyderabad.**—*For week ending 25th September.*—Average rainfall 1·60 inches in Berar. Standing crops healthy. Weeding continues. Prices of food-grains stationary. Pasturage sufficient.

Rainfall at Hyderabad during week, 2·53; total since 1st January, 29·03. *Kharif* and *abi* crops thriving. Prices stationary.

**Central India.**—*For week ending 25th September.*—Crops generally good throughout the Agency, but slightly damaged by excessive rain in parts of Neemuch. Prices high in Goona, falling in Bundelkhand and parts of Bhopawar.

**Rajputana.**—*For week ending 25th September.*—Slight rain in Marwar, Kherwara and Meywar. Standing crops slightly damaged by locusts in Marwar, Kishengarh and Ulwar. Rain much needed in Meywar, Bhurtpur, Ulwar and Harowtee. Agricultural stock good. Pasturage drying and fodder dear in Marwar. Prices steady generally.

**Nepal.**—*For week ending 19th September.*—Rain in showers and infrequent. Harvesting of early rice in progress. Prospects favourable.

E. C. BUCK,  
Secretary to the Government of India.

GOVERNMENT OF INDIA.  
PUBLIC WORKS DEPARTMENT.  
RAILWAY TRAFFIC.

No. XXII. OF 1889-go.

APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used as far as possible.

Latest Return received.	RAILWAYS.	WEEK ENDING 1ST SEPTEMBER 1888.		WEEK ENDING 31ST AUGUST 1889.		TOTAL RECEIPTS FROM 1ST APRIL TO 1ST SEPTEMBER 1888.		TOTAL RECEIPTS FROM 1ST APRIL TO 31ST AUGUST 1889.		Total increase in 1889-go.	Total decrease in 1889-go.		
		Total mean length open.	Receipts.		Total mean length open.	Receipts.		Total.	Per mile open per week.			Total.	Per mile open per week.
			Total.	Per mile open.		Total.	Per mile open.						
			Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		
State Lines worked by Companies.													
7th September 1889	East Indian	1,514	6,12,652	405	1,514	6,47,206	427	1,77,98,839	534	1,82,12,077	547	4,13,238	...
7th ditto	Patna-Gya.	57	6,299	111	57	6,455	113	1,76,430	140	1,80,758	144	4,328	...
7th ditto	Dildarnagar-Ghazipur	12	585	49	12	669	56	21,485	81	19,798	75	...	1,687
.....	Sindia	75	4,339	58	...	(a)	...	1,58,562	96	(a)	...	...	1,58,562
7th September 1889	Rajputana-Malwa	1,664	2,66,162	160	1,671	2,32,000	139	74,87,702	205	84,47,480	232	9,59,778	...
7th ditto	Bengal-Nagpur (b)	186	18,439	99	305	(c) 21,757	71	6,79,867	166	(c) 7,80,242	119	1,00,375	...
7th ditto	Southern Mahratta (d)	850	63,287	74	856	57,712	67	16,66,191	89	18,03,720	96	1,37,529	...
7th ditto	Do. Mysore Section	140	12,668	90	296	22,384	76	2,29,565	75	3,20,001	63	90,436	...
7th ditto	Indian Midland	136	10,136	74	746	(e) 43,881	59	3,12,645	104	(e) 12,02,803	85	8,90,158	...
31st August 1889	Villupuram - Dharma- veram (Nellore Branch)	83	4,766	57	83	5,285	64	1,07,266	59	1,06,558	59	...	708
7th September 1889	Bareilly-Pilibhit	36	1,252	35	36	1,280	36	33,617	44	41,796	55	8,179	...
TOTAL		4,753	10,00,585	211	5,576	10,38,629	186	2,86,72,169	274	3,11,15,233	264	24,43,064	...
State Lines worked by Government.													
7th September 1889	North Western (f)	2,469	4,74,400	192	2,386	5,03,924	211	1,00,81,846	186	1,13,42,468	217	12,60,622	...
7th ditto	Oudh and Rohilkhand	692	85,325	123	692	1,18,902	172	29,58,770	194	33,35,548	219	3,76,778	...
31st August 1889	Bengal Central	125	13,025	109	125	14,720	118	2,58,545	94	2,98,339	108	39,794	...
7th September 1889	Wardha Coal	45	14,127	314	45	11,082	246	3,12,543	316	3,34,133	340	21,590	...
31st August 1889	Eastern Bengal	673	2,56,790	382	747	2,66,110	356	35,89,352	242	39,15,851	253	3,26,499	...
7th September 1889	Nalhati	27	1,803	69	27	1,896	70	42,395	74	41,101	72	...	1,294
7th ditto	Tirhoot	259	18,517	71	273	30,997	114	7,05,766	130	8,26,936	144	1,21,170	...
7th ditto	Lucknow-Sitapur	103	3,942	38	103	6,310	60	1,09,063	47	1,44,483	63	35,420	...
7th ditto	Sihramau	25	1,530	61	25	1,336	56	25,605	47	26,492	48	887	...
31st August 1889	Jorhat	7	241	34	7	341	49	1,815	12	2,812	18	997	...
31st ditto	Cherra-Companyganj	392	49,225	126	553	72,821	132	12,31,998	147	17,99,244	149	5,67,246	...
TOTAL		4,819	9,19,585	191	4,985	10,28,499	206	1,93,17,698	183	2,20,67,407	204	27,49,709	...
Lines worked by Guaranteed Companies.													
7th September 1889	Madras	840	1,68,976	201	840	1,78,950	213	35,92,247	194	39,37,315	214	3,45,068	...
31st August 1889	South Indian	654	1,11,101	170	654	1,11,082	171	23,81,995	160	24,94,513	175	1,12,518	...
7th September 1889	Great Indian Peninsula	1,497	(h) 0,04,212	404	1,440	(i) 3,10,280	236	1,85,45,348	562	1,40,90,791	447	...	44,54,557
7th ditto	Bombay, Baroda and Central India (j)	461	1,75,001	380	461	1,46,000	317	52,79,289	521	55,81,768	554	3,05,479	...
TOTAL		3,452	10,59,350	307	3,395	7,76,912	229	2,97,98,879	392	2,61,07,387	352	...	36,91,492
GRAND TOTAL (GUARANTEED AND STATE)		13,024	29,79,520	229	13,956	28,44,040	204	7,77,88,746	272	7,92,90,027	264	15,01,281	...
GROSS ESTIMATED EXPENSES		...	...	...	...	...	...	4,07,64,777	142	4,14,14,463	138	6,49,686	...
NET RECEIPTS		...	...	...	...	...	...	3,70,23,969	130	3,78,75,564	126	8,51,595	...
Assisted Companies.													
7th September 1889	Tarakeshwar	22	2,886	131	22	4,197	191	1,22,376	250	1,25,249	256	2,873	...
31st August 1889	Dibru-Sadiya	78	7,318	94	78	8,108	104	1,83,254	110	2,10,857	123	22,003	...
7th September 1889	Bengal and North-Western	376	24,831	66	376	31,630	84	10,68,967	129	11,35,731	138	66,764	...
7th ditto	Rohilkhand-Kumaun	67	1,281	19	67	5,831	88	1,52,808	109	1,66,085	118	13,277	...
TOTAL		543	36,316	67	543	49,826	92	15,34,405	128	16,37,922	138	1,05,517	...
Native States.													
7th September 1889	His Highness the Nizam's Guaranteed	310	31,685	102	354	47,677	135	6,65,784	107	9,13,823	118	2,48,039	...
7th ditto	His Highness the Gaekwar's	59	1,617	27	59	1,710	29	57,400	44	57,113	44	...	287
7th ditto	His Highness the Gaekwar's Veramgam-Mehsana-Vadnagar	21	598	28	27	600	22	20,333	44	24,353	41	4,120	...
7th ditto	Bhavnagar-Gondal-Junagar-Porbandar	193	9,742	50	261	14,716	56	4,27,320	101	5,90,338	104	1,63,018	...
7th ditto	Morvi	63	2,205	33	68	2,086	40	81,261	54	90,377	60	9,116	...
7th ditto	Jodhpore	124	3,199	26	124	5,200	42	1,65,199	57	1,45,502	54	...	9,697
TOTAL		775	49,106	63	893	72,589	81	14,07,197	86	18,21,506	93	4,14,309	...

- (a) Included with Indian Midland Railway.  
(b) Includes the Katni-Umaria Branch.  
(c) Includes the Sanctoria Coal Section of the Bengal-Nagpur Railway.  
(d) Includes the Bellary-Kistna State Railway.  
(e) Includes the Sindia and Bhopal-Itarsi State Railways.  
(f) Includes the Amritsar-Pathankot and Rajpura-Bhatinda State Railways.

- (g) Includes the Toungou-Mandalay extension.  
(h) Includes the Dhond-Manmad, Khamsaon, Amratoti, and Bhopal-Itarsi State Railways.  
(i) Includes the Dhond-Manmad, Khamsaon, and Amratoti State Railways.  
(j) Includes the Patri Branch.

M. C. BRACKENBURY, Major, R.E.,  
Under-Secretary.

GOVERNMENT OF INDIA.  
PUBLIC WORKS DEPARTMENT.

ACCOUNT.

Railway.

GUARANTEED RAILWAYS.

SYNOPSIS OF TRANSACTIONS FOR AND TO END OF THE YEAR 1888.

No. 406 A.R., dated Simla, the 16th September 1889.

RESOLUTION—By the Government of India, Public Works Department.

Read again—

Public Works Department Resolution No. 821A.R., dated 5th October 1888.

Read also the following :

Note by LIEUTENANT-COLONEL A. G. BEGBIE, R.E., Officiating Accountant General, Public Works Department, No. 891R., dated 23rd August 1889.

I beg to lay before the Government of India the usual Synopsis of transactions of Guaranteed Railways for and to end of the year 1888.

2. The subscribed Capital on 31st December 1888 of the several Railway Companies bears interest as shown below :

Railway.	CAPITAL BEARING INTEREST AT						Premium on Stock.	Discount on Stock.	Total Capital raised.
	3½%	4½%	4%	4½%	4½%	5%			
	£	£	£	£	£	£	£	£	£
Madras ... ..	...	297,800	102,200	800,000	800,000	8,757,870	32,014	...	10,800,044
South Indian ... ..	...	970,000	...	425,000	151,044	2,067,908	63,453	3,000	4,863,405
Bombay, Baroda and Central India... ..	100,000	908,500	...	...	...	7,550,300	32,370	14,000	9,557,070
Great Indian Peninsula ... ..	1284,000	1,947,300	2,701,450	...	...	20,000,000	297,306	233,391	24,976,664
Oudh and Rohilkhand ... ..	...	3,080,300	284,700	...	...	4,000,000	16,923	47,611	7,363,311
(1) Total to end of 1888 ... ..	264,000	7,033,900	3,189,350	925,000	1,161,004	43,305,878	419,361	298,002	50,180,094
(2) Ditto ditto 1887 ... ..	100,000	6,909,300	5,402,150	935,000	1,159,504	43,303,503	419,630	298,002	50,035,204
(3) Ditto ditto 1886 ... ..	...	5,191,800	5,439,050	935,000	1,160,804	43,350,911	300,553	64,304	50,310,284
(4) Ditto ditto 1885 ... ..	...	4,481,800	6,217,450	935,000	1,169,084	43,346,189	309,105	66,134	50,306,094
(5) Ditto ditto 1884 ... ..	...	4,335,780	4,911,950	925,000	1,179,519	43,339,799	309,703	66,134	50,244,504
(1) Compared with (2) { Increase ... ..	264,000	84,600	...	...	...	2,375	123	...	...
{ Decrease ... ..	...	...	2,213,800	...	2,500	...	...	...	1,885,200

3. The following table shows the growth of the Capital account of the Guaranteed Railways during the last five years, the net increase to the aggregate subscribed Capital during that period being £2,777,429 :

TOTAL CAPITAL SUBSCRIBED.					Increase.	Decrease.	Remarks.
Year.		Amount.					
			£		£	£	
To end of 1884	...	...	54,844,594	...	1,471,929	...	
" 1885	...	...	56,295,094	...	1,450,500	...	
" 1886	...	...	56,210,294	...	...	84,800	
" 1887	...	...	58,085,294	...	1,825,000	...	
" 1888	...	...	56,160,094	...	...	1,885,200	
					4,747,429	1,970,000	
Net increase			...	...	2,777,429		

*Capital Outlay.*

4. The aggregate outlay finally charged off to "Construction" has stood at the end of each of the last five years as follows:

			£	Increase. £
To end of 1884	...	...	53,240,053	1,144,018
" 1885	...	...	54,516,361	1,276,308
" 1886	...	...	55,517,215	1,000,854
" 1887	...	...	55,920,875	403,660
" 1888	...	...	56,455,146	534,271
Increase in five years			...	4,359,111

5. The expenditure charged to "Construction," on the open lines of railway, during and to end of the year, gives the following cost per mile:

Railway.	CONSTRUCTION EXPENDITURE PER OPEN MILE.		Remarks.
	During 1888.	To end of 1888.	
	Rs.	Rs.	
Madras	1,565-98	1,34,728-34	Metre gauge.
South Indian	834-76	69,838-54	
Bombay, Baroda and Central India	885-21	2,07,553-16	
Great Indian Peninsula	2,514-49	2,07,006-56	
Oudh and Rohilkhand	419-11	1,29,342-46	
Average outlay excluding South Indian	1,606-72	1,72,003-26	
Ditto including ditto	1,477-49	1,54,900-30	

*Capital locked up in stores.*

6. The subjoined table shows the fluctuations in the value of stores in stock during the past five years. The figures in antique represent increases of stock:—

Railway.	REDUCTION IN STOCK.					Total reduction in five years.
	1884.	1885.	1886.	1887.	1888.	
	Rs.	Rs.	Rs.	Rs.	Rs.	
Madras	68,943	4,59,341	3,09,528	6,76,872	17,704	1,43,736
South Indian	94,461	4,83,856	3,54,488	5,54,202	5,57,460	13,35,491
Bombay, Baroda and Central India	1,86,482	2,78,316	6,48,977	4,31,054	5,90,250	4,64,198
Great Indian Peninsula	8,40,888	20,24,648	13,61,804	8,76,959	9,60,483	15,18,196
Oudh and Rohilkhand	6,62,439	8,84,483	20,34,445	34,209	1,87,131	24,27,782
TOTAL	2,98,473	24,11,752	40,93,186	6,01,984	17,613	20,02,558

7. The increase in the amount of Capital locked up in stores during the year under review on the South Indian Railway is attributed to the receipt of

Permanent Way materials for renewals, and that on the Bombay, Baroda and Central India Railway is said to be due to the late arrival of Permanent Way material and coal from England.

8. On 31st December 1888, the value of the stores in stock on Guaranteed Railways exceeded the limits provisionally assigned for Capital to be locked up in stores to the following extent:

Railway.	Limit assigned.	Stock in hand.	Excess.
	Rs. Lakhs.	Rs. Lakhs.	Rs. Lakhs.
Madras ... ..	22½	24½	2
South Indian ... ..	not fixed	(a) 34½	...
Bombay, Baroda and Central India ... ..	21½	37½	16
Great Indian Peninsula ... ..	63	60½	—2½
Oudh and Rohilkhand ... ..	12½	26½	14½
TOTAL ... ..	119½	149½	36

(a) Not included in the total.

#### Revenue Account.

9. Excluding the East Indian, Eastern Bengal, and Sindh, Punjab and Delhi Railways which have now become State lines, the gross earnings, working expenses, and net earnings of all the Guaranteed Railways during the last five years have been as under:

Year.	Gross earnings.	Working expenses.	Net earnings.
	Rs.	Rs.	Rs.
1884 ... ..	6,24,57,699	3,26,82,475	2,97,75,224
1885 ... ..	6,73,27,871	3,51,47,054	3,21,80,817
1886 ... ..	7,21,55,223	3,56,28,831	3,65,26,392
1887 ... ..	7,20,41,944	3,61,22,174	3,59,19,770
1888 ... ..	7,43,29,233	3,77,21,047	3,71,08,236

10. For the year 1888 the net earnings amounted to	Rs. ...	Rs. 3,71,08,236
Deduct—		
Interest charged on overdrawn Capital ...	81,439	
Moiety of Surplus Profits due to Shareholders ...	55,95,126	
Contributions to Provident Fund ...	2,14,483	
		58,41,048

The net receipts by Government due to its connection with the Guaranteed Railways may be stated at ... 3,12,67,188

11. The results of the working of the Guaranteed Railways for the year 1888, based on the contract rates of exchange, is shown in the following table,

as also the percentage of Interest and Net Profits on the Capital received. The figures in antique represent gain :

Railway.	Net earnings after deducting payments on account of Surplus Profits and contribution to the Provident Fund and interest on overdrawn Capital.	Guaranteed interest.	Loss to State.			Per cent. of interest paid on total Capital received.	Per cent. of Net Earnings realised during 1888 on Capital received.
			Amount.	Per open mile.	Per cent. of guaranteed interest.		
	Rs.	Rs.	Rs.	Rs.			
Madras ... ..	35,31,645	56,03,928	21,77,183	2,594.14	38.20	4.90	3.03
South Indian ... ..	16,67,481	22,24,122	5,56,641	850.37	25.03	4.57	3.43
Bombay, Baroda and Central India ...	57,61,106	44,93,045	12,71,061	2,890.61	28.29	4.81	6.17
Great Indian Peninsula ... ..	1,72,07,951	1,20,10,664	43,78,287	3,308.68	33.89	4.76	6.37
Oudh and Rohilkhand ... ..	30,16,005	*35,42,434	75,30,429	763.70	14.86	4.80	4.06
Total 1888 ... ..	3,12,67,188	*2,88,78,093	23,89,095	610.69	8.27	4.78	5.18
1887 ... ..	3,01,24,818	2,00,54,467	10,70,351	274.29	3.68	4.67	4.84
1886 ... ..	3,05,61,072	2,80,70,895	15,91,077	405.06	5.49	4.84	5.07
1885 ... ..	2,74,40,216	2,93,52,080	9,03,764	234.75	3.19	4.89	4.84
1884 ... ..	2,53,12,424	2,91,07,704	24,95,280	650.48	8.68	4.77	4.34

12. The result of working the Guaranteed Railways during 1888 may be considered satisfactory. The annual result in the last five years has been turned from a loss of Rs. 24,95,280 in 1884, to a gain of Rs. 23,89,095† in 1888.

13. The actual loss to the State during the last five years due to its connection with the Guaranteed Railways, if the payments in England on account of guaranteed interest are converted at the average rates of exchange for the different years, is shown in the following statements :

Year.	Net earnings—vide para. 11.	Guaranteed interest at contract rates.	Loss to State based on preceding column.	Guaranteed interest at the average rate of the year.	Loss to State based on preceding column.	Loss involved in fall in exchange, being difference between columns 4 and 5.
	1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1884 ... ..	2,53,12,424	2,91,07,704	24,95,280	3,21,56,560	66,44,145	40,48,085
1885 ... ..	2,74,40,216	2,93,52,080	9,03,764	3,40,01,117	65,51,901	66,48,187
1886 ... ..	3,05,61,072	2,80,70,895	15,91,077	3,07,65,398	62,03,426	77,94,603
1887 ... ..	3,01,24,818	2,00,54,467	10,70,351	3,79,65,093	78,40,876	69,11,226
1888 ... ..	3,12,67,188	*2,88,78,093	23,89,095	3,91,50,478	70,19,238	1,03,08,333

\* This excludes Interest to end of December 1888, amounting to £40,073, on debt appropriated to the discharge of debentures to the extent of £1,895,000, which fell due during the year. It has been decided to treat this payment as a State Railway charge.

† The real loss is understated by the sum of £40,073 referred to in the preceding note.

‡ The real gain is overstated by the sum of £40,073 referred to above.

The details for each year are as follows:

## 1884.

Railway.	Net earnings.	Guaranteed interest at contract rates.	Loss to State based on column 3.	Guaranteed interest at 1s. 7-500d., the average rate of the year.	Loss to State based on column 4.	Loss by exchange, being difference between columns 4 and 3.
	1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Madras ... ..	29,35,007	50,94,450	27,68,763	61,23,433	34,87,745	7,32,803
South Indian ... ..	14,00,006	21,17,129	6,56,531	24,96,708	10,36,110	3,79,579
Bombay, Baroda and Central India ... ..	54,43,459	43,30,164	11,23,088	48,72,790	5,70,453	5,53,636
Great Indian Peninsula ... ..	1,34,64,220	1,36,46,335	8,16,955	1,42,66,602	8,02,302	16,31,287
Oudh and Rohilkhand ... ..	23,08,607	33,30,676	16,23,029	40,97,093	17,66,441	7,66,412
TOTAL ... ..	2,56,12,424	2,81,07,704	24,95,280	3,21,66,669	65,44,145	40,48,865

## 1885.

Railway.	Net earnings.	Guaranteed interest at contract rates.	Loss to State based on column 3.	Guaranteed interest at 1s. 8-611d., the average rate of the year.	Loss to State based on column 4.	Loss by exchange, being difference between columns 4 and 3.
	1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Madras ... ..	32,79,168	56,66,628	24,19,060	67,36,306	34,87,088	10,37,376
South Indian ... ..	15,72,931	21,32,917	5,59,996	26,35,655	10,62,731	5,02,636
Bombay, Baroda and Central India ... ..	56,61,689	41,90,366	14,71,423	49,52,432	7,09,257	7,62,168
Great Indian Peninsula ... ..	1,32,31,697	1,37,91,998	24,39,601	1,51,15,011	1,16,536	23,23,015
Oudh and Rohilkhand ... ..	17,03,941	35,39,073	18,34,232	45,61,813	26,57,972	10,22,740
TOTAL ... ..	2,74,49,216	2,83,62,980	9,03,764	3,40,01,117	65,51,901	56,46,187

## 1886.

Railway.	Net earnings.	Guaranteed interest at contract rates.	Loss to State based on column 3.	Guaranteed interest at 1s. 5-600d., the average rate of the year.	Loss to State based on column 4.	Loss by exchange, being difference between columns 4 and 3.
	1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Madras ... ..	33,30,243	56,99,836	24,69,865	71,34,953	38,95,700	14,36,124
South Indian ... ..	14,69,564	21,69,964	6,69,780	26,35,838	13,65,914	6,69,164
Bombay, Baroda and Central India ... ..	61,35,479	44,37,981	16,97,597	56,47,675	5,87,803	11,09,794
Great Indian Peninsula ... ..	1,66,77,979	1,39,67,672	40,10,407	1,60,80,296	7,97,683	32,13,734
Oudh and Rohilkhand ... ..	26,40,698	37,97,260	9,47,562	51,76,947	23,27,250	13,79,697
TOTAL ... ..	3,08,61,972	2,80,70,895	15,91,077	3,67,65,398	62,03,420	77,94,608

## 1887.

Railway.	Net earnings.	Guaranteed interest at contract rates.	Loss to State based on column 2.	Guaranteed interest at 1s. 5'0016d., the average rate of the year.	Loss to State based on column 4.	Loss by exchange, being difference between columns 4 and 2.
	1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Madras ... ..	28,00,938	66,70,318	28,00,000	73,06,530	44,40,178	10,30,169
South Indian ... ..	10,05,744	21,91,202	5,85,458	20,49,000	13,42,962	7,67,404
Bombay, Baroda and Central India ... ..	57,39,568	44,70,000	12,50,500	57,51,814	28,240	12,94,945
Great Indian Peninsula ... ..	1,08,62,000	1,28,01,010	40,18,800	1,95,50,308	3,92,601	36,86,289
Oudh and Rohilkhand ... ..	30,30,280	38,45,020	8,00,000	53,08,339	23,02,100	15,52,410
TOTAL ... ..	3,01,31,918	2,90,51,407	10,70,361	3,70,65,003	78,40,876	89,11,226

## 1888.

Railway.	Net earnings.	Guaranteed interest at contract rates.	Loss to State based on column 2.	Guaranteed interest at 1s. 4'445d., the average rate of the year.	Loss to State based on column 4.	Loss by exchange, being difference between columns 4 and 2.
	1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Madras ... ..	35,21,045	50,09,828	21,77,183	70,23,861	41,02,206	10,25,023
South Indian ... ..	10,67,481	22,24,122	5,56,641	31,10,000	14,43,170	8,86,538
Bombay, Baroda and Central India ... ..	57,94,108	44,93,045	12,71,061	60,00,715	2,45,000	15,10,070
Great Indian Peninsula ... ..	1,72,07,051	1,30,10,004	43,78,287	1,72,74,700	23,245	43,55,043
Oudh and Rohilkhand ... ..	30,10,005	35,42,494	†5,20,420	51,67,494	†21,51,480	10,25,000
TOTAL ... ..	3,12,07,189	2,89,79,009	23,80,095	3,01,80,426	70,19,238	1,09,00,333

\* This excludes interest to end of December 1888, amounting to £ 40,073, on debt appropriated to the discharge of debentures to the extent of £1,885,000, which fell due during the year. It has been decided to treat this payment as a State Railway charge.

† The real loss is understated by the sum of £40,073 referred to in the preceding note.

ORDER.—Ordered, that the note by the Accountant General, Public Works Department, and enclosure referred to, be forwarded to the Local Governments and Officer noted in the margin, and to the Department of Finance, and the Accountant General, Public Works Department, for information.

The Governments of Madras and Bombay. Director General of Railways.

R. C. B. PEMBERTON, Colonel, R.E.,  
Secy. to the Govt. of India.



SUPPLEMENT TO  
**The Gazette of India.**

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No. 40.} CALCUTTA, SATURDAY, OCTOBER 5, 1889.

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OFFICIAL PAPERS.

*A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor General will in future be published in PART VI of the GAZETTE.*

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GOVERNMENT OF INDIA.  
DEPARTMENT OF FINANCE AND COMMERCE.

RETAIL PRICES FOR THE 1st HALF OF AUGUST 1889.

QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.

DISTRICTS.	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLAM ( <i>Sorghum vulgare</i> ).		BAJRA OR CUMBU. ( <i>Pennisetum typhoides</i> ).		MARVA OR RAGI ( <i>Eleusine coracana</i> ).		KANOHI OR KAKUM, ITALIAN MILLET ( <i>Setaria italica</i> ).		GRAM, CHENNA, CHOLA, KADALAY OR SUNAGA ( <i>Cicer arvensis</i> ).		MAIZE ( <i>Zea Mays</i> ).		ARHAR, OR THUR, CADIAN PEA ( <i>Caupane indicus</i> ).		FIREWOOD.		SALT.	
	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past
	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
<b>Burma—</b>																										
<i>Tenasserim—</i>																										
Mergui . . . . .	...	...	...	...	9 14	9 14	10 14	10 7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	428 0	428 0	11 11	11 11
Tavoy . . . . .	...	...	...	...	9 9	11 4	11 7	14 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	399 3	399 3	24 2	24 2
Moulmein and Amherst . . . . .	7 14	7 14	...	...	9 11	9 11	10 2	10 2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	220 0	220 0	20 8	20 8
<i>Pegu (dellaic)—</i>																										
Pegu . . . . .	...	...	...	...	8 14	9 7	9 7	11 3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	140 0	140 0	17 0	17 10
Kangoon . . . . .	11 2	11 2	...	...	10 6	12 6	12 6	13 2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	250 0	250 0	14 9	14 9
Thongwa . . . . .	...	...	...	...	10 43	10 13	10 7	12 13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	150 0	150 0	14 4	14 12
Bassein . . . . .	...	...	...	...	11 10	12 3	14 6	14 7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	245 6	245 6	11 6	14 3
<i>Pegu (inland)—</i>																										
Shwayyin . . . . .	...	...	...	...	9 1	8 8	9 9	9 9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	250 0	250 0	14 2	14 2
Tharawadi . . . . .	...	...	...	...	12 0	12 0	15 0	15 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	450 0	450 0	14 0	14 0
Henada . . . . .	...	...	...	...	8 15	10 4	11 2	15 10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	183 8	183 8	17 11	17 11
Prome . . . . .	12 2	12 2	...	...	10 5	10 12	12 7	13 1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	167 9	167 9	14 0	14 0
Tongoo . . . . .	...	...	...	...	9 2	9 2	12 13	12 13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	200 0	200 0	14 1	14 1
Thayetmyo . . . . .	11 3	11 3	...	...	10 0	10 0	11 8	11 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	326 11	326 11	11 3	11 3
<i>Upper Burma—</i>																										
Mandalay . . . . .	10 10	10 10	...	...	11 5	10 2	12 11	11 10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	65 0	65 0	17 12	17 12
<i>Arakan—</i>																										
Sandoway . . . . .	...	...	...	...	13 15	13 8	16 0	14 14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	469 11	469 11	24 0	24 0
Kyauk-pyu . . . . .	...	...	...	...	11 12	10 9	13 0	11 7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	320 0	320 0	36 0	36 0
Akyab . . . . .	...	...	...	...	11 8	11 8	13 8	13 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	160 0	160 0	16 0	16 0
<b>Assam—</b>																										
<i>Surma—</i>																										
Sylhet . . . . .	11 4	11 4	...	...	14 0	14 0	16 3	16 3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	108 0	108 0	10 0	10 0
Cachar . . . . .	9 8	7 8	...	...	10 10	10 0	16 0	16 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	80 0	80 0	9 8	9 8
Khasi and Jaintia Hills . . . . .	...	...	...	...	5 14	6 0	9 0	8 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	160 0	160 0	7 0	7 0
Garo Hills . . . . .	...	...	...	...	6 0	6 0	14 0	14 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	100 0	100 0	6 7	6 7
<i>Brahmaputra—</i>																										
Goalpara . . . . .	16 0	16 0	...	...	7 0	8 0	11 0	13 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	80 0	80 0	9 0	9 0
Kamrup . . . . .	10 0	10 0	...	...	11 10	11 10	14 0	14 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	150 0	150 0	8 8	8 8
Darrang . . . . .	6 8	6 8	...	...	8 0	7 8	16 0	16 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	120 0	120 0	9 0	9 0
Nowong . . . . .	8 0	8 0	...	...	6 8	6 8	14 0	14 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	100 0	100 0	8 8	8 8
Sibsagar . . . . .	...	...	...	...	6 8	6 8	11 9	11 9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	160 0	160 0	8 0	8 0

Bengal—
Eastern hill tracts—
Chittagong Hill Tracts . . . . .
Hill Tipperah . . . . .
Naga Hills . . . . .
Eastern—
Backergunge . . . . .
Noakhali . . . . .
Chittagong . . . . .
Tipperah . . . . .
Dacca . . . . .
Mymensingh . . . . .
Deltaic—
Koyna . . . . .
24-Pargunnas . . . . .
Midnapore . . . . .
Howrah . . . . .
Cuttack . . . . .
Hooghly . . . . .
Nuddca (Kishinagar) . . . . .
Jessore . . . . .
Furzed pore . . . . .
Central—
Bankora . . . . .
Beruwān . . . . .
Burnham . . . . .
Moorsheadabad . . . . .
Sonthal Pergunnas . . . . .
Pubna . . . . .
Bogra . . . . .
Raisahye . . . . .
Maldah . . . . .
Northern—
Rangpora . . . . .
Dumra pore . . . . .
Jalpāganj . . . . .
Daryesing . . . . .
Oriasa—
Poorce . . . . .
Cutlack . . . . .
Balasore . . . . .
Choia-Nagpur—
Singhoom . . . . .
Manbhoom . . . . .
Lohardugga . . . . .
Hasanibagh . . . . .

† Not procurable.

• Not sold.

(b) R1.4 per 100 cobs.

(a) Eight annas per 100 cobs.

## RETAIL PRICES FOR THE 1st HALF OF AUGUST 1889—continued.

QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.

DISTRICTS.	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLU ( <i>Sorghum vulgare</i> ).		BAJRA OR CUMBU ( <i>Pennisetum typhoides</i> ).		MARUA OR BAGI ( <i>Eleusine indica</i> ).		KARGNI ITALIAN MILLET ( <i>Setaria italica</i> ).		GRAM, CHENNA, CHOLA, RADALAY OR SUNAGA ( <i>Cicer arizianum</i> ).		MAIZE ( <i>Zea Mays</i> ).		ARHAR, OR TURK, CADIAN PEA ( <i>Cajanus indicus</i> ).		FIRWOOD.		SALT.	
	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past
	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
<b>Bengal—continued.</b>																										
Behar, south—																										
Monghyr . . . . .	15 15	16 12	17 14	18 10	10 8	10 8	11 10	11 14	..	..	..	..	..	..	..	..	19 6	18 14	17 14	21 0	17 13	126 0	126 0	9 14	9 14	9 14
Gya . . . . .	14 8	15 8	16 0	17 0	9 0	10 0	12 8	13 8	20 0	17 0	..	..	..	..	..	..	20 0	17 8	18 0	18 0	17 0	200 0	200 0	9 2	9 2	9 2
Pana . . . . .	16 0	16 0	17 0	18 0	10 0	10 0	13 4	12 8	..	..	..	..	..	..	..	..	19 0	18 0	..	..	12 8	130 0	130 0	9 8	9 8	9 8
Shahabad . . . . .	14 8	14 0	17 0	18 0	9 0	9 0	13 4	12 8	..	..	..	..	..	..	..	..	17 0	18 0	..	..	12 8	120 0	120 0	10 0	10 0	10 0
Behar, north—																										
Purneah . . . . .	15 0	14 0	..	..	10 0	11 0	11 0	13 0	..	..	..	..	..	..	..	..	17 0	..	..	..	16 0	120 0	120 0	9 0	9 0	9 0
Bhagalpur . . . . .	16 6	15 12	17 10	18 10	10 11	10 11	12 10	12 10	..	..	..	..	..	..	..	..	17 10	17 10	21 7	17 10	17 10	151 8	151 8	10 1	10 1	10 1
Durrhanga . . . . .	14 13	15 5	16 9	18 8	9 6	9 6	12 5	13 6	17 11	..	..	..	..	..	..	..	18 13	18 4	..	..	18 8	160 0	160 0	11 6	11 6	11 6
Mosuffepore . . . . .	13 8	14 0	16 0	16 0	9 0	10 0	12 0	13 0	..	..	..	..	..	..	..	..	16 0	16 0	16 0	16 0	18 0	160 0	160 0	10 0	10 0	10 0
Saran . . . . .	15 4	14 8	17 12	17 8	8 0	8 4	11 8	11 2	..	..	..	..	..	..	..	..	19 0	17 9	17 4	17 4	20 0	160 0	160 0	10 0	10 0	10 0
Champarn . . . . .	13 8	13 8	15 0	15 8	7 0	8 0	10 8	10 0	..	..	..	..	..	..	..	..	16 0	15 0	14 0	15 0	16 8	160 0	160 0	10 0	10 0	10 0
<b>N.-W. Provinces—</b>																										
Eastern—																										
Mirzapur . . . . .	13 0	17 0	17 0	17 0	7 0	7 0	11 0	11 0	15 0	16 0	14 0	15 0	14 0	14 0	12 0	12 0	16 0	17 0	16 0	16 0	19 0	90 0	90 0	10 0	10 0	10 0
Benares . . . . .	14 6	14 10	19 0	19 0	8 15	9 0	12 7	11 6	17 5	16 8	14 14	14 14	..	..	..	..	18 11	18 11	19 0	19 0	19 4	120 0	120 0	10 6	10 6	10 6
Ghazipur . . . . .	14 12	15 7	18 10	18 10	7 0	7 0	12 0	12 0	15 7	15 7	12 15	14 3	..	..	..	..	18 11	18 11	16 12	18 0	19 6	194 8	154 8	10 6	10 6	10 6
Jaunpur . . . . .	14 8	14 0	20 0	21 0	7 0	7 0	12 0	12 0	..	..	..	..	..	..	..	..	22 0	21 0	16 12	18 0	21 0	140 0	140 0	8 8	8 8	8 8
Allahabad . . . . .	14 0	14 0	18 12	18 12	7 0	7 0	10 0	10 0	..	..	16 0	16 0	..	..	..	..	20 0	20 0	16 0	16 0	20 8	120 0	120 0	11 0	11 0	11 0
Central—																										
Alnada . . . . .	15 8	14 8	21 8	19 8	7 8	7 8	10 12	10 12	..	..	..	..	..	..	..	..	24 0	21 8	..	..	13 8	160 0	160 0	10 4	10 4	10 4
Fatehpur . . . . .	15 0	14 8	22 0	20 0	10 4	10 4	10 12	10 12	..	..	..	..	..	..	..	..	22 8	21 8	..	..	25 0	160 0	160 0	10 4	10 4	10 4
Bramipur . . . . .	16 10	16 0	24 6	21 14	9 0	9 0	10 15	10 15	..	..	..	..	..	..	..	..	26 5	24 2	..	..	29 12	160 0	160 0	10 9	10 9	10 9
Jalaun . . . . .	16 0	15 0	19 0	19 0	9 0	9 0	10 10	10 10	18 0	18 0	17 4	17 4	..	..	..	..	22 0	21 0	18 0	18 0	21 0	140 0	140 0	10 0	10 0	10 0
Cawnpore . . . . .	16 12	16 0	23 8	22 0	8 8	8 8	11 8	11 8	25 0	23 0	17 0	17 0	..	..	..	..	24 0	22 8	18 0	18 0	23 8	140 0	140 0	10 0	10 0	10 0
Etawah . . . . .	17 8	16 8	23 8	20 4	5 0	5 0	10 0	9 8	19 4	18 0	17 0	17 0	..	..	..	..	24 8	23 8	24 0	19 0	26 0	100 0	100 0	10 8	10 8	10 8
Farukhabad . . . . .	16 0	15 4	21 8	20 4	7 0	6 8	9 8	9 8	..	..	..	..	..	..	..	..	23 8	23 8	..	..	21 8	120 0	120 0	10 8	10 8	10 8
Mainpuri . . . . .	17 0	17 0	25 10	23 4	4 12	4 8	13 0	12 0	18 0	18 0	15 0	16 0	..	..	..	..	27 8	25 10	..	..	28 6	160 0	160 0	10 8	10 8	10 8
Etah . . . . .	17 4	17 4	25 0	23 4	7 8	7 8	10 8	10 8	..	..	..	..	..	..	..	..	28 0	28 0	..	..	20 0	160 0	160 0	11 0	11 0	11 0
Western—																										
Fatehpur . . . . .	14 12	14 8	20 0	20 0	8 8	8 8	10 0	10 0	18 0	18 0	14 0	14 0	..	..	..	..	18 8	17 8	18 0	17 0	12 8	80 0	80 0	10 4	10 4	10 4
Jhansi . . . . .	15 12	14 8	20 4	21 0	7 12	7 12	11 5	10 12	18 0	18 0	17 12	17 12	..	..	..	..	22 8	21 8	..	..	21 13	160 0	160 0	10 8	10 8	10 8
Agra . . . . .	14 8	14 8	19 8	19 8	5 0	5 0	9 0	9 0	20 6	20 6	18 8	18 8	..	..	..	..	22 0	22 0	25 0	22 0	17 8	100 0	100 0	11 8	11 8	11 8
Mittra . . . . .	15 8	15 0	22 8	21 8	7 0	7 0	10 0	10 0	22 0	22 0	18 0	18 0	..	..	..	..	23 0	22 0	20 0	20 0	27 8	120 0	120 0	11 4	11 4	11 4
Aligarh . . . . .	16 4	16 0	22 12	22 12	6 0	6 0	10 0	10 0	21 0	21 0	17 0	17 0	..	..	..	..	24 8	23 12	28 8	28 8	30 0	130 0	130 0	11 8	11 8	11 8
Bulandshahr . . . . .	17 8	16 4	26 0	25 8	7 0	6 8	10 0	9 0	20 0	20 0	18 0	18 0	..	..	..	..	26 0	25 8	28 0	27 0	20 0	120 0	120 0	11 4	11 4	11 4
Meerut . . . . .	17 0	17 0	25 8	25 8	5 8	5 8	10 0	11 0	22 0	22 0	20 0	20 0	..	..	..	..	23 4	22 8	23 0	22 0	26 8	100 0	100 0	11 4	11 4	11 4
<b>Sub-montane—</b>																										
Balla . . . . .	14 8	14 4	17 12	18 0	9 12	9 12	13 0	13 0	..	..	..	..	..	..	..	..	20 0	19 4	..	..	20 8	155 0	155 0	10 9	10 9	10 9
Azamgarh . . . . .	12 8	12 8	18 8	18 8	8 14	8 14	11 1	11 1	..	..	..	..	..	..	..	..	18 8	18 8	..	..	14 0	177 8	177 8	9 13	9 13	9 13
Gorakhpur . . . . .	13 10	13 10	18 0	19 4	9 0	9 0	11 1	11 1	..	..	..	..	..	..	..	..	18 14	20 0	..	..	14 0	140 0	140 0	10 6	10 6	10 6
Basti . . . . .	15 8	15 8	20 0	22 0	8 8	8 8	13 8	14 0	12 0	10 0	..	..	..	..	..	..	22 0	22 0	19 0	19 0	21 0	140 0	140 0	9 0	9 0	9 0
Shahjahanpur . . . . .	17 8	17 8	27 0	27 0	6 0	6 0	11 0	11 0	..	..	..	..	..	..	..	..	26 8	26 8	..	..	26 8	160 0	160 0	10 0	10 0	10 0
Budaun . . . . .	17 4	17 4	26 4	25 8	6 0	6 0	11 0	11 0	..	..	..	..	..	..	..	..	26 8	26 8	..	..	26 8	160 0	160 0	10 0	10 0	10 0
Philibut . . . . .	16 4	15 8	30 0	30 0	11 4	11 4	12 0	11 14	16 4	20 0	..	..	..	..	..	..	27 0	26 4	24 0	23 0	32 0	150 0	150 0	10 12	10 12	10 12

Oudh—	Barilly	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100			
	Moradabad	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100				
	Turai	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100					
	Bijnor	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100						
	Muzaffarnagar	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100							
	Saharanpur	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100								
	Dehra Dun	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100				
	Kumaun	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
	Gairwal	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100							
	Southern—	Partabgarh	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100		
Sahānpur		15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100			
Rae-Bareilly		16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100				
Unao		16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100				
Lucknow		15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100			
Hardoi		16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100				
Northern—		Fyzabad	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
		Barabanki	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100		
		Gonda	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100			
		Bahraich	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100			
	Sitapur	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100					
	Khetri	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46																																																												

**& Not sold.**

\* Six dies per bundle.

100

## RETAIL PRICES FOR THE 1st HALF OF AUGUST 1886—continued.

Districts.	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLU (Sorghum vulgare).		BAJRA OR CUMBU (Pennisetum typhoides).		MARUA OR RAGI (Eleusine indica).		KANGNI OR KAKUM, ITALIAN MILLET (Setaria italica).		GRAM, CHENNA, CHOLA, KADALAY OR SUNAGA (Cajanus indicus).		MAIZE (Zea Mays).		ARHAR, OR THUR, CADJAN PEA (Cajanus indicus).		FIRWOOD.		SALT.	
	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past
	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
<b>Punjab—</b>																										
<b>Southern—</b>																										
Hisar . . . . .	18 0	17 0	26 0	24 0	10 0	9 0	22 0	19 0	19 0	18 0	20 0	15 0	1 0	1 0	15 0	16 0	25 0	23 0	17 0	17 0	11 0	11 0	105 0	110 0	10 0	10 0
Ferozepore . . . . .	19 0	19 0	32 0	30 0	9 0	9 0	24 0	24 0	24 0	24 0	20 0	15 0	1 0	1 0	24 0	28 0	25 0	28 0	20 0	19 0	11 0	11 0	100 0	100 0	13 4	13 0
Montgomery . . . . .	18 0	18 0	25 0	24 0	9 0	9 0	24 0	24 0	24 0	24 0	20 0	15 0	1 0	1 0	24 0	28 0	25 0	28 0	20 0	19 0	11 0	11 0	200 0	200 0	11 0	11 0
<b>Central—</b>																										
Gurgaon . . . . .	16 0	16 0	24 0	24 0	10 0	9 0	24 0	24 0	24 0	24 0	21 0	15 0	1 0	1 0	12 0	12 0	23 0	23 0	22 0	22 0	20 0	20 0	130 0	130 0	11 0	11 0
Delhi . . . . .	17 0	17 0	24 0	23 0	10 0	10 0	23 0	21 0	21 0	19 0	18 0	15 0	1 0	1 0	12 0	12 0	23 0	23 0	22 0	22 0	20 0	20 0	86 0	86 0	11 0	11 0
Rohat . . . . .	17 0	17 0	23 0	24 0	10 0	10 0	24 0	24 0	24 0	24 0	20 0	15 0	1 0	1 0	12 0	12 0	24 0	24 0	16 0	16 0	20 0	20 0	120 0	120 0	10 0	10 0
Karnal . . . . .	17 0	17 0	26 0	26 0	10 0	10 0	20 0	20 0	20 0	20 0	16 0	15 0	1 0	1 0	12 0	12 0	27 0	27 0	25 0	25 0	20 0	20 0	160 0	160 0	10 0	10 0
Lahore . . . . .	18 0	18 0	32 0	32 0	9 0	9 0	28 0	22 0	22 0	22 0	16 0	15 0	1 0	1 0	22 0	22 0	28 0	23 0	26 0	16 0	12 0	12 0	95 0	95 0	12 0	12 0
<b>Sub-montane—</b>																										
Umballa . . . . .	20 0	20 0	24 0	24 0	10 0	10 0	20 0	18 0	16 0	16 0	17 0	15 0	1 0	1 0	10 0	10 0	27 0	27 0	32 0	32 0	20 0	20 0	120 0	120 0	13 0	13 0
Ludhiana . . . . .	21 0	22 0	36 0	32 0	10 0	10 0	30 0	27 0	19 0	23 0	20 0	15 0	1 0	1 0	21 0	21 0	31 0	28 0	30 0	32 0	14 0	14 0	110 0	110 0	12 8	12 8
Jullundur . . . . .	21 0	20 0	32 0	30 0	8 0	8 0	24 0	24 0	20 0	20 0	20 0	13 0	1 0	1 0	18 0	20 0	28 0	28 0	32 0	32 0	16 0	16 0	100 0	100 0	12 8	12 8

Kontan—		9 8	10 4	...	6 8	6 8	6 8	10 8	10 14	18 0	18 0	13 0	13 0	13 0	20 0	21 0	...	10 0	11 8	...	...	9 8	10 0	213 5	213 5	...	11 0	11 0
Karwar		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ratangiri		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Colaba (Alibag)		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bombay		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tanna (Salsette)		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Deccan—		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dharwar (Hubli)		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Belgaum		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Satara		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sholapur		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bijapur		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Poona (City)		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Khandesh—		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ahmednagar		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nasik		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Khandesh (Dhulia)		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Guzerat—		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Surat		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Broach		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kaira		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Baroda Camp (Sadar Bazar)		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ahmedabad (Daskrohi)		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Panch Mahals (Godhra)		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Deesa Cantonment		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kathiawar—		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rajkot		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Central Provinces—		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Western—		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nimar		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Khandwa-Asigrah Cant.		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hoshangabad		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Betul		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chhindwara		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nagpur		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wardha		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Central—		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Narsinghpur		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Saugar		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Damoh		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Jubbulpore		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mandla		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Seoni		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Balaghat		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bhandara		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chanda		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eastern—		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bilaspur		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Raipur		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sambalpur		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Berar—		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Buldina		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Basim		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Akola		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ellichpur		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Amruti		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wun.		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nizam's Territories—		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Secunderabad		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bolarum		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chadarghat		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

• Not sold.

† Not produced.

‡ Not procurable.

§ Firewood is sold by head-loads, cart-loads, and bullock-loads.

## RETAIL PRICES FOR THE 1st HALF OF AUGUST 1889—concluded.

QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.

DISTRICTS.	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLU (Sorghum vulgare).		BAJRA OR CUMBU (Pennisetum typhoides).		MARUA OR RAGI (Eleusine indica).		KANGNI OR KAKUN, ITALIAN MILLET (Setaria italica).		GRAM, CHENNA, CHOLAY, KADALAY OR SUNAGA (Cicer arietinum).		MAIZE (Zea Mays).		ARHAR, OR THUR, CADJAN PEA (Cajanus indicus).		FIREWOOD.		SALT.	
	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.
	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
<b>Madras—</b>																										
<b>Malabar Coast—</b>																										
Malabar . . . . .	8 10	8 10	...	...	11 13	11 5	12 10	12 3	...	...	...	...	20 6	20 6	...	...	...	...	...	...	...	...	136 2	136 2	11 11	11 11
S. Canara . . . . .	8 2	8 2	...	...	10 10	10 10	11 5	11 5	...	...	...	...	19 5	21 13	...	...	...	...	...	...	...	...	128 13	128 13	12 5	12 5
<b>South, central—</b>																										
Coimbatore . . . . .	11 8	11 8	...	...	12 10	12 10	13 10	13 10	21 11	21 11	23 14	25 6	26 3	26 3	...	...	...	...	...	...	...	...	133 10	133 10	12 11	12 11
Nilgiris . . . . .	10 11	10 11	...	...	9 10	10 0	11 3	11 3	18 8	19 5	16 13	18 3	20 3	20 3	...	...	...	...	...	...	...	...	161 13	161 13	11 0	11 0
Salem . . . . .	10 13	10 13	...	...	11 13	11 3	13 3	13 3	27 5	27 5	24 10	23 0	29 2	29 2	...	...	...	...	...	...	...	...	186 10	186 10	13 8	13 8
<b>Central—</b>																										
Bellary . . . . .	13 6	13 6	...	...	12 3	11 13	13 8	13 5	28 10	28 10	21 2	21 10	33 0	34 0	...	...	...	...	...	...	...	...	97 3	97 3	11 14	11 14
Anantapur . . . . .	11 8	11 8	...	...	12 13	12 13	14 0	14 0	31 6	31 6	25 6	25 6	32 0	31 0	...	...	...	...	...	...	...	...	194 6	194 6	11 5	11 5
Cuddapah . . . . .	12 8	12 14	...	...	11 10	11 10	12 8	12 14	22 14	20 8	...	...	31 8	30 0	...	...	...	...	...	...	...	...	140 0	140 0	12 2	12 2
Kurnool . . . . .	10 3	11 6	...	...	10 11	10 11	11 6	11 6	26 6	24 11	21 5	20 0	...	...	...	...	...	...	...	...	...	...	142 14	142 14	11 11	11 11
<b>East Coast, north—</b>																										
Ganjam . . . . .	6 3	7 2	...	...	9 8	9 8	10 0	10 0	...	...	...	...	15 8	16 6	...	...	...	...	...	...	...	...	167 11	167 11	12 13	12 13
Vizagapatnam . . . . .	12 0	12 0	...	...	9 0	9 0	10 3	10 3	20 0	17 13	23 13	15 13	18 3	18 3	...	...	...	...	...	...	...	...	116 10	116 10	11 11	11 11
Godavari . . . . .	10 6	9 14	...	...	13 6	13 6	14 8	14 8	23 0	23 0	21 2	22 14	23 11	25 8	...	...	...	...	...	...	...	...	243 0	243 0	12 0	12 0
<b>East Coast, central—</b>																										
Kistna . . . . .	10 6	10 6	...	...	11 8	11 8	12 2	12 2	19 0	19 0	...	...	23 13	23 13	...	...	...	...	...	...	...	...	170 2	170 2	13 3	13 3
Nellore . . . . .	10 10	10 10	...	...	12 3	12 3	13 3	13 3	22 11	22 11	...	...	27 13	27 13	...	...	...	...	...	...	...	...	93 5	93 5	12 13	12 13
<b>East Coast, south—</b>																										
Madras . . . . .	10 13	10 13	...	...	11 8	11 6	12 13	12 10	...	...	...	...	26 5	25 11	...	...	...	...	...	...	...	...	93 11	93 11	12 5	12 5
Chingleput . . . . .	9 6	9 6	...	...	12 6	12 0	13 3	12 13	...	...	...	...	24 11	24 11	...	...	...	...	...	...	...	...	122 8	122 8	12 6	12 6
S. Arcot . . . . .	8 10	8 10	...	...	13 8	13 2	13 3	13 3	...	...	...	...	29 2	29 2	...	...	...	...	...	...	...	...	194 6	194 6	11 5	11 5
Tanjore . . . . .	8 13	8 13	...	...	13 8	13 2	14 0	14 0	...	...	...	...	25 6	22 5	...	...	...	...	...	...	...	...	209 0	209 0	11 11	11 11
Trichinopoly . . . . .	8 14	8 14	...	...	13 11	13 11	14 0	14 0	...	...	...	...	27 3	26 6	...	...	...	...	...	...	...	...	166 3	166 3	12 6	12 6
<b>Southern—</b>																										
Tinnevely . . . . .	9 3	9 3	...	...	11 2	11 2	12 0	11 10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	53 5	53 5	14 6	14 6
Madura . . . . .	10 13	10 2	...	...	12 10	12 3	13 2	13 2	24 5	24 5	...	...	24 13	24 13	...	...	...	...	...	...	...	...	140 14	140 14	13 10	13 10
<b>Mysore—</b>																										
Mysore . . . . .	10 0	10 0	10 0	10 0	9 4	9 0	10 4	10 0	28 0	28 0	18 0	18 0	30 0	30 0	...	...	...	...	...	...	...	...	84 0	84 0	9 0	9 0
Bangalore . . . . .	9 8	9 8	10 8	10 8	9 8	9 8	10 8	10 8	22 0	22 0	...	...	32 0	32 0	...	...	...	...	...	...	...	...	84 0	84 0	9 4	9 4
Kolar . . . . .	...	...	10 0	10 8	10 0	10 0	12 8	12 8	...	...	...	...	39 0	37 0	...	...	...	...	...	...	...	...	144 0	144 0	9 8	9 8
Tumkur . . . . .	11 0	11 0	11 0	11 0	10 8	11 0	11 8	12 0	...	...	...	...	48 0	48 0	...	...	...	...	...	...	...	...	340 0	340 0	9 0	9 0
Hassan . . . . .	...	...	11 0	11 0	11 0	11 0	13 0	13 0	...	...	...	...	48 0	48 0	...	...	...	...	...	...	...	...	46 0	46 0	9 0	9 0
Kadur . . . . .	10 0	10 0	11 0	11 0	12 0	12 0	16 0	16 0	...	...	...	...	40 0	40 0	...	...	...	...	...	...	...	...	240 0	240 0	8 0	8 0
Shimoga . . . . .	12 10	12 10	13 10	13 10	12 10	12 10	14 11	14 11	31 8	33 10	...	...	48 5	48 5	...	...	...	...	...	...	...	...	480 0	480 0	8 6	8 6
Chitaldrug . . . . .	12 0	12 0	14 0	13 0	11 0	11 0	13 0	13 0	40 0	40 0	32 0	32 0	50 0	50 0	...	...	...	...	...	...	...	...	320 0	320 0	9 0	9 0
<b>Coorg—</b>																										
Coorg . . . . .	9 0	9 0	8 0	8 0	10 8	10 8	12 8	12 8	...	...	...	...	35 0	33 0	...	...	...	...	...	...	...	...	110 0	110 0	8 8	8 8
<b>Aden</b> . . . . .	8 0	8 0	...	...	6 3	6 3	8 0	8 0	10 3	10 3	9 4	9 4	...	...	...	...	...	...	...	...	...	...	65 5	65 5	32 0	32 0

\* Not sold.

DEPARTMENT OF FINANCE AND COMMERCE,  
(Statistical Branch).E. J. SINKINSON,  
Secretary to the Government of India.

GOVERNMENT OF INDIA.  
PUBLIC WORKS DEPARTMENT.  
RAILWAY TRAFFIC.

GENERAL RULES FOR WORKING INDIAN RAILWAYS.

No. 512 R. T., dated Simla, the 23rd September, 1889.

RESOLUTION—By the Government of India, Public Works Department.

Read again—

Section 8 of Act IV (the Indian Railway Act) of 1879.

Public Works Department Notification No. 299, dated 13th September 1880 (publishing the General Rules for all Railways in India) and Public Works Department Circular No. 17 Railway, dated 21st August 1880.

Public Works Department Resolution No. 504 R.T., dated 21st May 1886.

Read also—

Letter from the Consulting Engineer to the Government of India for Railways, Central Division, No. 2019 T., dated 29th August 1889.

OBSERVATIONS.—In accordance with the provisions of Section 8 of the Indian Railway Act IV of 1879, the Agent and Chief Engineer of the Indian Midland Railway has applied that Rules 342 and 343 of the General Rules for Indian Railways, which have been made applicable to the Indian Midland Railway under the Resolution read above, should be modified so as to read as follows:—

“No. 342.—No engine or train shall be moved from any station until the Driver has in his possession a “Line Clear,” “Caution Message,” or other permission written on the authorized form showing that he can proceed to the next station. The Driver is to receive this written permission from no other person than the Guard of his own train, or from the Station Master, or from one of the Station staff duly authorised for such duty; but on all occasions when the Guard does not personally deliver the permission to the Driver, it must be countersigned by the Guard before delivery to the Driver. The Driver must also receive from the Guard the usual starting signal before moving.

When a train is arranged to run through a station without stopping, the written permission to proceed to the next station may be handed to the Driver direct by the Station Master or other authorised person of the Station staff, and a duplicate of it handed to the Guard in the same manner.

“No. 343.—The Station Master, or other authorised person of the Station staff, is to hand the written permission to the Guard, who must satisfy himself that it is properly filled up and dated, with the time added, and is signed in full and in ink, and that it applies to the particular train or engine for which it is given and received, before handing it to the Driver. The Driver must also satisfy himself on these points before starting.

This written permission is never to be given to the Driver until the train is to start; and when waiting to pass another train, it must not be given to the Driver until the whole of such other train has come in and is clear of the points.

When a train is not timed to stop at a station, and the written permission is handed both to the Driver and Guard of the train, the Station Master will be held wholly responsible that it applies to the particular train or engine for which it is given, and that it is properly filled up and dated, with the time added, and is signed in full and in ink.”

RESOLUTION.—The Governor General in Council is pleased, under Section 8 of the said Act, to sanction the application to the Indian Midland Railway of Rules 342 and 343 of the General Rules for Indian Railways modified as shown above.

ORDER.—Ordered, that Rules 342 and 343 of the General Rules for Indian Railways, modified as shown above, be notified to the Railway servants and the public by a copy of this Resolution being kept open to inspection, free of charge, together with a copy of the General Rules and of Public Works Department Resolution No. 504 R.T., dated 21st May 1886, in the Office of the Station Master of every station on the said Railway.

Ordered also, that this Resolution be communicated to the Consulting Engineer to the Government of India for Railways, Central Division, for information and guidance; and that it be published in the *Gazette of India*.

R. C. B. PEMBERTON, Colonel, R.E.,  
Secretary.

GOVERNMENT OF INDIA.

HOME DEPARTMENT.

The Governor-General in Council directs the publication of the following papers for general information :

NOTE ON THE PROGRESS MADE IN THE SETTLEMENT OF UPPER BURMA FROM APRIL 1887 TO AUGUST 1889.

No. 1759 (Public), dated Simla, the 4th October, 1889.

From—C. J. LYALL, Esq., C.I.E., Officiating Secretary to the Government of India, Home Department,

To—The Chief Commissioner of Burma.

I am directed to acknowledge the receipt of your Secretary's letter No. 41—274, dated the 3rd ultimo, with which you forward a Note on the progress made in the pacification of Upper Burma from April 1887 to August 1889.

2. In reply I am to say that the Governor-General in Council is of opinion that the record of progress which the Note contains is in a high degree creditable to Sir Charles Crosthwaite's administration of the Province. His Excellency in Council desires to take this opportunity of publicly expressing his appreciation of the ability, energy, and consideration which the Chief Commissioner has brought to bear on one of the most difficult tasks which have fallen to the lot of any administrator in India in recent years, and his approbation of the unwearied attention which the Chief Commissioner has devoted to every branch of the administration. His Excellency in Council feels assured that now that the return of the peaceful inhabitants of the country to their daily pursuits has been rendered possible by the suppression or surrender of almost all the principal leaders of organized crime, the revenues of Upper Burma will rapidly develop, and has in particular noticed with much satisfaction the measures which the Chief Commissioner has in contemplation for some reduction of the most serious burden on the revenues of the Province, *viz.*, the cost of the Military police. While however the Governor-General in Council would welcome any measure of economy which could be carried out without affecting the efficiency of the administration, he is content to leave to you the determination of the time and measure of the reduction that should be effected in the police, and has no wish to press upon you any curtailment of the forces available for the maintenance of order which might result in the recrudescence of those forms of crime which have now been so successfully suppressed.

No. 41—274-N., dated Rangoon, the 3rd September, 1889.

From—H. THIRKELL WHITE, Esq., C.S., Officiating Chief Secretary to the Chief Commissioner, Burma,

To—The Secretary to the Government of India, Home Department.

I am directed to submit for the information of the Government of India a Note on the progress made in the Settlement of Upper Burma from April 1887 to August 1889.

NOTE.

At the beginning of the year 1887, though much had been done to break the power of the most important opponents of the British Government in Upper Burma, and though the foundations of order had been laid, District Officers had not yet found time to seriously undertake the task of organizing the civil administration of their districts. The work of the first year of the occupation was to a great extent the work of the soldier, the task of dealing with leaders who, nominally at least, aimed at overthrowing the new Government. It is not too much to say that although much remains to be done before the administration of Upper Burma can bear strict comparison with that of settled provinces in India, the last two years and a half have witnessed good progress made. It may certainly be said that disorder and lawlessness have been put down, and that the power of the Government is firmly established and fully

acknowledged. To describe rapidly but precisely the progress of this work is the object of this Note.

2. The town of Mandalay, which contains nearly 200,000 inhabitants and is the centre of any political intrigue or discontent that may exist, has been undisturbed by any serious outbreak since April 1886. Since the beginning of 1887 it has been as free from serious crime as any town in India. A Municipality has been established; and the Committee, which comprises representatives of all classes of the community, takes much intelligent interest in the affairs of the town. Many good roads have been made, the principal quarters are well lighted, and a very large number of substantial masonry houses have been erected within the last two years, and building is still going on. In April 1887 the condition of the district was less satisfactory than that of the town. The south-eastern parts of the district were troubled by the Setkya Pretender, who was reported in August 1887 to have a permanent following of 200 men and to be able to call out about 300 when required. Nga To and Nga Yaing held the islands of the Irrawaddy and were harboured and supported by the villages near the river bank. Nga Zeya held the tract of country known as Yegyi-Kyabin to the north and north-east of the district. Among many minor leaders may be mentioned Nga Pan Gaing, Nga Lan, Nga Thein, Nga Tha Aung, Nga Tha Maung, Nga Aung Min, and Nga Nu. The whole district outside the walls of Mandalay was more or less under the influence of these leaders, who levied contributions on the villages in the tracts which they dominated. By steady perseverance, and without demanding more than occasional assistance from the troops, the district has been freed from all these leaders. Since the 1st April 1887 three have been killed, seven have been captured, and twenty-five have surrendered. The Setkya Pretender, driven out of the Mandalay district into Kyaukse and thence into the Shan States within the present year, has been captured, tried, and executed. Nga Yaing's gang has been dispersed and he himself recently captured in Shwebo and executed. Nga Zeya, at one time the most formidable of all, has been driven out of the district and forced to take refuge on the borders of Taungbaing and Momeik. Nga To, the last of the leaders who gave serious trouble in the Mandalay district, was hotly pursued during the early months of the current year and every member of his gang either killed, captured, or compelled to surrender. Nga To himself, without a single follower and with his influence thoroughly broken, is now a fugitive and has disappeared. At the present time there is in the Mandalay district not a single dacoit leader and not a single organized band of dacoits. The only probable source of trouble is Nga Kyaw Zaw, one of the Setkya Pretender's leaders, who still lingers on the borders of the Pyinulwin subdivision and the Kyaukse district. The number of violent crimes during the current year has not been greater than in an ordinary district in Lower Burma, and such crimes as are committed have been the work of local criminals, not of regularly organized bands of dacoits. Survey operations have been undertaken in the district and regular methods of administration everywhere introduced. In the open season thousands of pack-bullocks and footmen carrying loads come down from the Shan States and from China. The Municipal returns show that the trade by the Thibaw route has doubled. In 1887-88 13,300 pack-bullocks, with merchandise valued at Rs. 4,56,518, entered Mandalay. In 1888-89 the number of laden bullocks was 27,170, and the value of the goods Rs. 7,30,279. It may safely be asserted that the town and district of Mandalay have seldom been so secure and peaceful as at present. On 1st July 1889 the Deputy Commissioner wrote:

"I have quite recently visited a large portion of the Pyinulwin subdivision and of the Madaya and Kutywa townships, and nowhere did I see any distress. The villagers appeared to me to be remarkably happy and contented, and they commented frequently on the abnormal freedom from dacoity and cattle-lifting which they were enjoying.

"There was no appearance of discontent. On the contrary, the people were most loyal in their manner and seemed to be in good health and spirits."

3. The Shwebo district has always been noted for the turbulent character of its inhabitants. In this district the progress made has been almost as marked as in Mandalay. In the beginning of 1887 Nga Yaing and Nga To were still powerful in the south of the district; Nga Kyauk Lôn was giving trouble in the north; and Nga Thôn and Nga Aga, with a band of about 30 men, disturbed the central part of the district from Male to the borders of Ye-u on the

west. Of these Nga Yaing, who troubled the district from 1886 to the middle of 1889, has recently been arrested by a local Burmese official; Nga To, as already explained, has disappeared. Kyauk Lôn, Aga, and Nga Thôn have still to be accounted for. They haunt the forests in the northern part of the district, but have recently committed no serious crimes. The southern part of the district is perfectly quiet; the people are everywhere disposed to take part with the Government against the dacoits. The condition of the Shwebo district is in striking contrast with its condition a year or two ago, when violent crimes were of common occurrence. During the past three months violent crimes have been less frequent in Shwebo than in many districts in Lower Burma. Mr. Morison, Deputy Commissioner of Shwebo, wrote on 30th June 1889:

"The exodus from Upper Burma which commenced in 1882 continued until the end of 1887, but I am glad to be able to report that it has now ceased from this district, and numbers of families are now returning from Lower Burma—a fact which in itself would prove the untruth of the assertion of widespread discontent. It will however take many years for the country to regain the prosperity which it enjoyed during the reign of King Mindôn Min.

"Dacoity has now almost entirely ceased in this district, and villages which were removed to other sites are being permitted to return. Trade is reviving and cultivation is everywhere being pushed on to the full capacity of the stock of plough-cattle."

4. The greater part of the Katha district which lies to the north of Shwebo is and has been undisturbed. The proximity of the State of Wuntho under Native administration is however a permanent source of trouble, especially in the Kawlin subdivision. While the people of Wuntho are allowed to possess arms practically without restraint, it has been difficult to insist on the complete disarmament of the adjoining subdivision of Kawlin. In consequence of this, dacoity by organized bands has not been entirely stamped out. Moreover, gangs from Wuntho occasionally raid in our territory. It is impossible to remedy this evil all at once. It is not neglected, and the Sawbwa will in time learn the advantage of assisting the Government to maintain order. The attitude of the Wuntho Sawbwa has not been entirely satisfactory; but he has not been openly unfriendly, and recently he has co-operated with the officers of the Katha district in dealing with dacoit gangs on his borders, and is reported to have punished some local officials who were in the habit of harbouring dacoits. The rest of the district, as has already been said, is quiet. The Deputy Commissioner has recently succeeded in establishing friendly relations with the Kachins on the north of the district. During the past open season a Survey party carried a reconnaissance for the Mu Valley Railway right through the State of Wuntho and were assisted by the local officials under the Sawbwa's orders.

5. In the Bhamo district the results attained have been most important. In 1887 the Mogaung subdivision had been visited; but it was practically beyond the limits of our control. The Kachin tribes of Mogaung, who, under the influence of the *ex-Myoök* Maung Po Saw and his lieutenant Nga Ti, gave much trouble in the spring of 1888, have now been severely punished by a mixed force of troops and police, which operated in the hills from February to May in the current year. The result has been that about a hundred Kachin villages have tendered their submission and are now on friendly terms with the local officers. The rebel leaders above mentioned have disappeared. The road to the jade mines is open and protected by a military police post at Kamaing, which commands the principal route. Travellers can now proceed from Mogaung to the jade mines and back without fear of molestation by the Kachin tribes. In the part of the district nearer to the town of Bhamo equally good results have been attained. The Pônkan Kachins, who defied our authority successfully in 1886, and who during the past open season raided within a few miles of Bhamo itself, have been punished and compelled to make terms. This was accomplished almost without opposition. A military force under General Wolseley occupied the principal village of the tribe and remained there long enough to make it evident that the Government intended to compel complete submission. The Kachins complied with the terms imposed on them, which included the restoration of captives, the payment of a moderate indemnity, and the surrender of a number of guns. The results of the past two years in the Bhamo district include the settlement of the Mogaung subdivision and the establishment of police posts there; the adjustment of our relations with the Kachin tribes, most of whom may now be regarded as friendly; and the opening out of the route to the jade mines. The Kachins nearer Bhamo have also been taught

that they cannot raid with impunity, and it is probable that raids will not now be of frequent occurrence.

6. The remaining district of the Northern division, the Ruby Mines district, lies on the borders of the dependent States of Thibaw, Mainglôn, Taungbaing, and Momeik. Such elements of disorder as still exist in this district are the result of the imperfect administration of these States. From the beginning of 1887, after the occupation of the district by General Stewart's force till the end of 1888, this district was undisturbed. Towards the end of 1888 reports were current that the town of Momeik, the capital of the State of that name, was threatened by a large gathering of dacoits or rebels under Saw Yan Naing, a grandson of Mindôn Min, whose headquarters was at Binbong or Manpun,\* some three days' march to the north-east of Momeik. In consequence of these reports a small detachment of troops was stationed at Momeik; and after an unfortunate encounter in which, owing to insufficient information, a handful of troops suffered a reverse, a considerable body of dacoits which had advanced towards Momeik was attacked and defeated with heavy loss. These disturbances, however affected the rest of Momeik and the Ruby Mines district, the garrison of which had been weakened by the withdrawal of part of a Gurkha regiment for the Chin expedition. Twinngè is an important village of 300 houses on the bank of the Irrawaddy, at that time included in the State of Momeik; it was attacked and burnt by a gang under Nga Maung of Twinngè, one of the lieutenants of Kan Hlaing, the claimant to the Sawbwaship of Momeik. Another man of the same name, known as Nga Maung of Mainglôn, formerly Myoza of that State, and other minor dacoits from the same neighbourhood threatened the district and caused a feeling of insecurity to be felt. On the Taungbaing border, Nga Zeya, the noted dacoit leader who had been driven out of the Mandalay district, was reported to have a considerable following. Some dacoities were committed in the district, and travellers on the road from Thabeikkyin to the Ruby Mines were attacked. A general feeling of insecurity prevailed; and the state of the district was less satisfactory in the early months of 1889 than it had been for the past two years. In order to deal effectually with the dacoit gangs which were reported to be in or on the borders of the district, the military garrison was strengthened and the command of all the troops and police was placed in the hand of Colonel Cochrane of the Hampshire Regiment. Under his orders an attack was made on Saw Yan Naing's stronghold at Binbong and his gathering was dispersed. At the same time steps were taken to strike at the root of the evil by improving the administration of the neighbouring States. The Sawbwa of Thibaw was induced to reform his administration in Mainglôn, a more competent ruler was established in Momeik, and the Sawbwa of Taungbaing was enjoined to look to his borders. In view of the great importance of keeping order in the Ruby Mines district, the civil police has been reorganized and strengthened and an extra company, which will consist of Gurkhas, will be added to the military police battalion. The military garrison will also be strengthened by the substitution of Gurkha for Madras troops. At present, except for a small gang which commits petty robberies on travellers, the district is quiet.

7. The districts in the Central division of Upper Burma are Sagaing, Lower Chindwin, Upper Chindwin, Kyauksé, and Ye-u. Writing on the 1st June 1889, the Commissioner of this division says:

"During a recent tour, extending from the 20th March to the 27th May, I have travelled through all the districts of this division; have visited nearly all the townships and many villages in four of these districts. \* \* \* \* \*

"The crops have been good and cultivation is extending. I saw evidence of this everywhere. \* \* \* \* \*

"In nearly all the townships of the division visited during my recent tour I saw evidences of comfort and in parts of affluence. 'Pwès,' 'ahlus,' and other festivities were going on in all quarters, even where least to be expected. The only exception to this condition was in a part of the Ava subdivision, where cattle-disease has lately been literally raging and smallpox has been very prevalent. In some of the Ava villages these two afflictions had retarded cultivation. But these are epidemic, and although very serious indeed, they did not seem to have left the same mark on the people as they would have done in Lower Burma."

8. In the beginning of 1887 Sagaing and Ava, which were then separate districts, were practically held by dacoit bands, who levied contributions on the

\* Binbong and Manpun are not, as had been supposed, the same. They are about 10 miles apart in the hills north-east of Momeik. Both places have been named at various times as the headquarters of Saw Yan Naing.

villages and kept the country side in terror. The most important leader in Sagaing, Hla U, was killed by his own followers early in 1887; but his lieutenants, among whom the chief were Nyo U, Nyo Pu, and Min O, remained and, notwithstanding that numerous bodies of troops were employed to pursue the gangs, gathered strength as the year advanced. On the Ava side Shwe Yan and Bo Tôk, with large gatherings, committed many dacoities and successfully defied the local officials. The pacification of the Sagaing district (including the Ava district, which had been incorporated with it) was systematically undertaken early in 1888 by Colonel (now Brigadier-General) W. P. Symons, assisted by various civil officers. It was found impossible to make any way by the methods hitherto employed. The troops never saw the dacoits, who continued to levy taxes from the villagers and to murder village officials and others suspected of aiding the Government. The Village Regulation was made use of, villages which fed the gangs were removed or fined, and the relatives of the dacoits who furnished them with supplies and with information and were the chief instruments in assassinating the friends of the Government were removed until the dacoits surrendered or were captured. A great change for the better soon followed these measures. The operations were steadily continued, and by the beginning of the current year all parts of the Sagaing district were in perfect order. Up to the present time twenty-six leaders, among whom were Nyo U, Nyo Pu, Shwe Yan, and Bo Tôk, have been killed; twenty-six, including Nga Sawbwa and Min O, captured; and seven have surrendered. Many followers of these leaders have also surrendered, the rank-and-file having been allowed to return to their homes on furnishing security for their good behaviour. The whole of the district has been thoroughly disarmed. Both Sagaing and Ava are now as peaceful as an ordinary Lower Burma district; the people live undisturbed in their villages and cultivate their fields; and, according to the statements of the people themselves, the district is more free from crime than it has ever been before. The dacoit leaders who remain at large are of no importance and have given no trouble.

9. The Ye-u district borders on the Upper and Lower Chindwin districts, Shwebo, and Katha, while on the north it touches the territory of Wuntho. It is in many parts covered by extensive forests which afford shelter to dacoits and in which it is difficult for troops or police to operate. Since April 1887 eight dacoit leaders have been killed and only four, of whom the most important is Yan Gyi Aung, remain at large. The greater part of the district is in good order. But the northern township is still troubled by dacoits from the adjacent territory of Wuntho.

10. The Lower Chindwin district is in excellent order. In October 1887 a rising occurred in Pagyi, the south-western part of the district bordering on the Yaw country. This was suppressed after one encounter with the dacoits, in which two British officers were killed, and the country was for the time restored to order. The elements of mischief were however not entirely removed. The country is exceedingly malarious, and it was not thought right to maintain police posts in the Shitywagyaung tract, which is the part of the Western Pagyi township adjacent to Yaw where the disturbances occurred. Towards the end of 1888 another attempt was made to excite a rising in this tract, but the ring-leader, a pseudo-prince, was arrested, tried, and executed. Military police were sent to Shitywagyaung, and the dacoits and disaffected persons moved westward towards Gangaw and caused serious disorder in the Yaw country. The rising was not promptly and effectually dealt with by the troops at Gangaw and the adjacent posts, and reinforcements had to be sent. The Yaw country was then settled without much difficulty, the great majority of the persons who had taken part in the rising being allowed to return to their homes. But some of the Pagyi dacoits, under the leadership of a noted local dacoit called Saga, driven back towards the Lower Chindwin district, continued to give trouble. A military police post was therefore established in the Shitywagyaung country and a special officer was deputed to bring this tract into order. The result has been entirely satisfactory. Under the direction of the Commissioner of the Central Division, Mr. Smeaton, the operations have resulted in the death of Bo Saga, who was recently killed by a party headed by the loyal and zealous Myoök of Western

Pagyi, Maung Po O,\* and many of the members of Saga's gang have surrendered. The result is that the whole of the Lower Chindwin district is quiet. Since April 1887 fifty dacoit leaders have been killed and captured or have surrendered in this district, and only five remain who are included in the list of dacoit leaders reported as still at large in Sagaing and Ye-u.

11. The Upper Chindwin district includes a vast extent of territory, part of which is still practically unknown. It extends to the borders of Manipur on the north-west and to the Mogaung country on the north and east. Except for slight disturbances in Mingin, caused by the gang of Saga above mentioned, the whole of the district has been little troubled by ordinary dacoity. Raids on the State of Kale, which adjoins the Upper Chindwin district, and on the Kubo valley, which forms part of it, were committed in 1887-88 by Chins of the Tashôn, Siyin, and Kanhaw tribes. The two last named tribes were severely punished during the open season of 1888-89, and preparations for an expedition on an extensive scale for the subjugation of the Tashôn and other tribes to the south are now being made. On the east of the Chindwin river a dacoit leader named Naga Le still holds out. He was attacked two or three months ago and his camp destroyed. Since then he has not been heard of. But till he is captured or killed the peace of the district will not be secure. During the coming open season it is proposed to explore the country between the Chindwin river and the jade mines of Mogaung; and advantage will be taken of the opportunity to establish friendly relations with the Kachin Chiefs in this part of the country.

12. The Kyauksè district, the remaining district of the Central Division, was in 1886 one of the most disturbed parts of Upper Burma. In 1887 and 1888 it was disturbed by a pretender known as the Setkya Mintha, against whom operations had to be undertaken in October last. The result was that the Mintha was driven out of the district into the Shan hills to the east. There he was captured and handed over by the loyal Sawbwa of Yat Sauk; he was tried and executed. Another noted leader, Myat Hmôn, who had surrendered and afterwards absconded in 1887, again surrendered with his followers towards the end of 1888, and is now living quietly in his own village. The only dacoit leader of any note still at large in Kyauksè is Kyaw Zaw, one of the Setkya Pretender's lieutenants, who still haunts the difficult and wild hills to the north-east on the borders of Kyauksè and Mandalay, but does little mischief. It will be necessary to dispose of him. Subject to this, which is scarcely an exception, the Kyauksè district is perfectly quiet. It has recently been found possible to effect a considerable reduction in the military police force of the district—a sure indication of tranquillity.

13. The Myingyan district, which includes the country between Ava and Magwe and between the Irrawaddy river and the Eastern Division, was disturbed during 1887 and 1888. Two notorious dacoit leaders named Yan Nyun and Bo Cho, with their bands, infested the western part of the district and committed atrocious crimes. In the early part of the current year special measures were taken to reduce this part of the district to order. The result was that the gangs of Bo Cho and Yan Nyun were entirely broken up and dispersed. Most of the members of these gangs were permitted to surrender and are now living quietly in their villages. Bo Cho and Yan Nyun have not been captured; but they have no following and are not now actively mischievous. There will be however no security against new outbreaks until they are taken. The district, which includes the very difficult country in the vicinity of Popa hill, is now quiet. Many of the villages which had been temporarily moved have been allowed to return to their former sites, and the state of this part of the country is becoming satisfactory. The result of the past two-and-a-half years' work in the Myingyan district has been the death in action of 17 dacoit leaders, the capture of 16 others, and the surrender of 18 besides. There are still 14 leaders unaccounted for, but they are no longer at the head of gangs of dacoits.

14. The Pakòkku district includes the Yaw country, to which reference has already been made. The rising in the neighbourhood of Gangaw in December last having been suppressed, that part of the district is in good order. The rest

\* Maung Po O, who has recently been decorated by His Excellency the Viceroy, is an Upper Burman, a nephew of the Kinwun Mingyi, one of the Chief Ministers of Mindôn Min.

of the district was disturbed by local gangs during the greater part of the years 1887 and 1888. None of these gangs were formidable in point of numbers; but they committed many local dacoities. Of late the people have evinced a most praiseworthy spirit in affording information and in resisting attacks by dacoits. The result is that the whole district is in excellent order and that serious crime is practically extinct. Only three leaders, who have of late given no trouble, remain undisposed of.

15. The result of the work done in the last two years in the Minbu district may be regarded with pleasure. Ever since the annexation of Upper Burma this district had been in a most disturbed state. Bo Swé, Ôktama, Ôktaya, Byaing Gyi, Tha Do, and Tha Tu were among the best known leaders: for many months they held almost the whole of the district. The well-directed and sustained efforts of the Deputy Commissioner, Mr. Hartnoll, and of his Assistants, Mr. Collins and Mr. Hertz, have resulted in the complete pacification of this important district. Bo Swé was killed in the Thayetmyo district towards the end of 1887: the credit of this is due to the Military Officers working the Thayetmyo district. Every other leader of note in the Minbu district has now been either killed or captured or has surrendered. Ôktama was at the head of a large organization and at one time numbered his followers by hundreds. In 1886 he attacked and burnt Sagu, and later on besieged Salin with a large force. Gradually his power was broken, and finally, within the last few weeks, he was captured by a Burmese Myoók. At the time of his capture he was in hiding, with only one follower. A few days before Ôktaya, Ôktama's principal lieutenant, and Byaing Gyi, another leader who had given much trouble, had been captured, the latter being given up by his own men. The list of dacoit leaders killed, captured, or surrendered since April 1887 in the Minbu district includes the names of 106 persons. This takes no account of the individual members of the various gangs, hundreds of whom have been permitted to surrender. The Deputy Commissioner reckons that there are left eight leaders on the borders of the Minbu and Thayetmyo districts. None of these are of any importance.

16. The Magwe district is the only part of Upper Burma which is still disturbed otherwise than by outlaws, who have been driven to the hills, or by raiders from Native States. In this district, owing to the inefficiency of the staff and the inferior quality of the military police who were recruited in Bombay, dacoit bands have been allowed to gather strength and to remain unpunished. Till recently, dacoities on a large scale were of almost daily occurrence. Special measures, of which the result is already apparent, have recently been taken to restore order in Magwe. There is every reason to expect that within the next few months the Magwe district will be as orderly as other parts of the province. General Symons reports that the situation is changing daily for the better, and that numbers of men are surrendering. The Chief Commissioner, marched through the district in July, in company with General Symons.

17. In the Eastern Division excellent work has been done in every district. On the 8th June 1889 the Commissioner wrote:

"The extraordinary increase in the thathameda collections of 1888-89 as compared with those of 1887-88 is, I think, a marked indication of the improved state of affairs. The figures of the two years are as follows:

DISTRICT.	1887-88.	1888-89.
	Rs. •	Rs. •
Pyinmana . . . . .	49,028	67,680
Yamèthin . . . . .	1,60,372	2,11,780
Meiktila . . . . .	1,99,507	2,64,600
TOTAL . . . . .	4,08,907	5,44,060

"The increase in the collections under this head, which are based on the number of households in each village, is no doubt due in some measure to the return to their villages

of a large number of people who in the previous year had either fled from the dacoits or were themselves members of dacoit or rebel bands. There are now no large dacoit gangs in any part of the division. English officers ride all over the Yamèthin and Meiktila districts unarmed and without escort of any kind, while in most parts of the Pyinmana district also an escort is unnecessary."

In the early months of 1887 Meiktila was much disturbed by large gangs of dacoits on the north and west. These were for the most part disposed of in May 1887. During the last two years and a half eleven dacoit leaders have been killed, six have been captured, and nine have surrendered. There are now no dacoit gangs or leaders in the Meiktila district. The Deputy Commissioner writes :

"Every one is hard at work ploughing, and we have just had most excellent rains. In short, the Meiktila district has almost recovered from the ravages of 1886 ; the people are happy and contented, but are of course unhappy at having lost so many bullocks this year from disease. If only the crops are good this year, the district will be in perfect order in 1890."

The Yamèthin district is also perfectly quiet, and the strength of the military police force has been reduced. The Deputy Commissioner reports :

"Speaking from an acquaintance of nearly two years with the district, I can say with knowledge that the condition of the people is improving in every way. In the first place, violent crime has decreased in such a way that it may be almost said not to exist, which means that the element of fear and insecurity has been correspondingly reduced. Again, the thathameda revenue, though regularly increasing very largely in amount, was collected with a rapidity which astonished us and which shows that no difficulty was experienced in paying it. People who had fled during the disturbances to the Shan States and to other districts are returning to their old homes ; the value of landed property for purposes of sale or mortgage is rising largely, showing that a feeling of security prevails."

The Chief Commissioner visited this district lately, and was informed by the Commissioner and Deputy Commissioner that they could give up four or five companies of military police without risk.

The Pyinmana district, which was for a long time one of the most disturbed districts in Upper Burma, is now in good order. Since April 1887 sixteen prominent leaders have surrendered and ten have been killed or captured. Only three leaders of any note remain at large, and none of these is now in the Pyinmana district. In this district the Bombay Burma Trading Corporation are carrying on extensive work in the forests. They have recently returned to Rangoon one hundred muskets which they had obtained for the protection of their employes, the orderly state of the district rendering the retention of these weapons no longer necessary. On the 5th June last the Deputy Commissioner wrote :

"The gangs of dacoits which have not yet been disposed of are few in number, receive no fresh accession of strength, and are of no political significance. They are mainly composed of men who under the Burmese régime were known as bad characters, or who have placed themselves outside the pale of mercy by their own misdeeds. The sympathy at first extended to them by the population at large is fast disappearing, and public feeling is being rapidly enlisted on the side of law and order, as is shown by the frequent information received from the people themselves as to the doings of dacoits, which have led to important arrests of late, and by the fact that captured dacoits admit that they have to commit dacoity to save themselves from starvation, because they can no longer depend on villagers giving them the food they require. To such straits have dacoits been reduced by the indifference and in some cases the active opposition of their quondam friends, that they have preferred in some cases quite lately to surrender unconditionally, with their arms, to leading the miserable life they now do. I have five such cases under trial. The attitude of the country towards officials and Europeans generally is tested by the fact that though officers of all ranks ride through the wildest parts of this wild district with an escort of not more than two mounted orderlies, they are never in any way interfered with. The Bombay Burma Corporation Assistants often travel alone and sometimes unarmed on forest duty in outlying tracts with perfect safety. I do not wish in any way to minimize the difficulties which still exist and which must be overcome before this district is brought into perfect order. My only object in stating the above facts is to show that headway is being made against crime and criminals, and that the majority of the population is siding with, and to a certain extent assisting, us in our struggle against disorder. Possibly the district may be again disturbed. If so, it will be the result of outside influences and not from an uprising of internal elements of disorder."

18. It is hoped that the facts stated in the preceding paragraphs will be held to show that progress has been made during the past two or three years in the pacification of Upper Burma. The districts of Mandalay, Sagaing,

the Lower and Upper Chindwin, Kyaukse, Myingyan, Pakòkku, Minbu, Meiktila, Yamèthin, and Pyinmana are in excellent order: there is not more crime in them than in an ordinary Lower Burma district. The same remarks apply to a great part of the Shwebo, Ye-u, and Katha districts. The Bhamo district, essentially a hill and frontier district, is untroubled. The only noted dacoit leaders who remain have been driven out of the plain country and have sought refuge in the hills among the wild tribes which inhabit the fringe of the upper province. The statement which has been made that Upper Burma is becoming depopulated is not only false but entirely the reverse of the truth. In most districts people who had left their homes and gone to Lower Burma in the time of disturbance are now returning to their former districts in large numbers.

19. Frontier affairs have also been efficiently dealt with. Before the arrival of British troops at Nyaunggywe in 1887 the whole of the States were in a condition of anarchy. Desolating wars were being waged between the rulers of the several States and the country was rapidly falling to ruin. Now profound tranquillity rules throughout the whole of the Shan country; and the Chiefs are not only at peace, but on terms of friendship, with each other. The attitude of all the Shan Sawbwas, including the Chief of the important State of Theinni, is most satisfactory; and order is maintained without difficulty by the mere presence of six companies of military police. In Eastern Karenni a satisfactory settlement has been made, and the Chief who wantonly attacked territory under British protection has been deposed to make room for a ruler who is actively loyal and anxious to stand well with the British Government. Mention has already been made of the measures taken to reduce to order the wild Kachins of the Bhamo district. These measures were entirely successful, and there is every reason to expect that friendly relations with these tribes will now be maintained. Active operations were undertaken against the Chins who inhabit the hills between Bengal and Arakan and Upper Burma. These operations will be continued during the coming cold season.

20. Of the material progress of the country the revenue returns afford satisfactory indications. The revenue collected in Upper Burma during the past three years was as follows:

	Rs.
1886-87 . . . . .	22,24,980
1887-88 . . . . .	50,16,360
1888-89 . . . . .	73,45,435

The figures for 1888-89 do not include Public Works or Railway receipts. The actual receipts exceeded the estimate by Rs. 4,85,435. The land revenue collections have increased from Rs. 16,71,730 in 1886-87 to Rs. 37,87,730 in 1887-88 and to Rs. 43,65,375 in 1888-89. There has been also an increase under the heads of Stamps and Excise. The estimated revenue for the current year is Rs. 76,74,000. One of the best tests of the state of the country is the amount of the thathameda, which is a tax on households, not on individuals. In two districts, Katha and Pyinmana, the only districts from which the figures are available, the number of households has increased from 9,624 to 10,677 and from 5,769 to 6,782 respectively. In Bhamo the thathameda collections increased from Rs. 48,890 in 1887-88 to Rs. 54,275 in the past year. In Katha the increase was from Rs. 83,470 to Rs. 1,06,385. The figures of thathameda for the Eastern Division, as given by the Financial Commissioner, are as follows:

	1887-88.	1888-89.
	Rs.	Rs.
Meiktila . . . . .	1,99,508	2,73,336
Yamèthin . . . . .	2,15,312	2,18,188
Pyinmana . . . . .	37,465	74,950
<b>TOTAL . . . . .</b>	<b>4,52,285</b>	<b>5,66,474</b>

21. The recently published report on the inland trade of the province for the past year shows that there has been on the whole a large increase in the volume of the trade between Upper and Lower Burma. The following table shows the trade between Upper and Lower Burma during the past five years :

ROUTES.	Years.	Exports to Lower Burma.	Imports from Lower Burma.	Total.
		Rs.	Rs.	Rs.
<i>River Routes.</i>				
Irrawaddy	1884-85	1,70,87,169	1,99,36,690	3,70,23,859
	1885-86	1,24,69,382	1,53,66,706	2,78,36,088
	1886-87	1,21,51,429	2,06,10,100	3,27,61,589
	1887-88	1,34,96,388	3,27,45,145	4,62,41,533
	1888-89	1,78,69,581	2,75,03,370	4,53,72,951
Sittang	1884-85	17,07,371	2,76,667	19,84,038
	1885-86	25,06,865	1,85,675	26,92,540
	1886-87	7,35,209	1,36,314	8,71,523
	1887-88	10,10,180	84,072	10,94,252
	1888-89	24,97,639	...	24,97,639
<i>Land Routes.</i>				
Kyaukpyu	1884-85	33,361	43,219	76,580
	1885-86	16,238	16,546	32,784
	1886-87	24,326	19,014	43,340
	1887-88	33,866	25,973	59,839
	1888-89	37,234	24,455	61,689
Thayetmyo	1884-85	8,06,272	96,902	9,03,174
	1885-86	3,32,700	44,281	3,76,981
	1886-87	6,07,766	28,423	6,36,189
	1887-88	8,97,556	42,349	9,39,905
	1888-89	6,78,977	54,623	7,33,600
Toungoo	1884-85	6,05,157	3,60,760	9,65,917
	1885-86	1,96,638	4,66,711	6,63,349
	1886-87	58,521	1,62,613	2,21,134
	1887-88	1,16,320	21,725	1,38,045
	1888-89	3,27,074	26,31,092	29,58,166

The total value of the exports from Upper Burma into Lower Burma was Rs. 2,14,10,505 in 1888-89 as compared with Rs. 1,55,54,310 in the preceding year; of imports into Upper Burma, Rs. 3,02,13,540 as compared with Rs. 3,29,19,264 in 1887-88. The total value of the trade by the Irrawaddy river was less than in the previous year, aggregating Rs. 4,53,72,951 against Rs. 4,62,41,533. There was however a large increase under the head of exports to Lower Burma, the difference in favour of the past year being Rs. 43,73,193. In the value of imports from Lower Burma by the Irrawaddy route there was a decrease of Rs. 52,41,775. The increase in the case of exports occurred under the head of cattle, fruits, oils, silk goods, unrefined sugar, jade, letpet (pickled tea), and timber. Imports of piece-goods were less than in 1887-88 owing to the markets being overstocked by large imports in the previous year. The largest decrease (Rs. 24,00,000) occurred under the head of cleaned rice. This is a satisfactory sign as showing that the food-supply of the upper districts had become more nearly equal to the consumption. The trade by land routes increased from Rs. 11,37,789 in 1887-88 to Rs. 37,53,455 in the past year. Commenting on the inland trade of the quarter ending on the 31st December 1888, one of the local newspapers\* remarked as follows :

"The report on the inland trade of Burma for the quarter ending the 31st December last shows signs of steady progress. There is a decline of about three lakhs, it is true, in

\* Rangoon Gazette, dated 23rd March 1889.

the exports from Lower to Upper Burma; but as two lakhs of this are due to the exports of paddy and rice having been reduced to about 12½ lakhs of rupees worth in the third quarter of 1888-89 against about 14½ lakhs worth in the corresponding quarter of the preceding year, this decline is satisfactory. It is altogether an unusual and unsatisfactory condition of things that Upper Burma, with its scanty and poor population, should be in any way dependent on an imported supply of food; and a decrease in the imports of paddy and rice to the extent of two lakhs of rupees a quarter may show that, although parts of the country are still disturbed, throughout a considerable portion of the settled tracts the people are taking more to agriculture, and in the course of a few years more Upper Burma should be in a position to export a large quantity of surplus grain instead of having to import considerable supplies of food, because cultivation is neglected and the people are wholly given over to dacoity and lawlessness, as has been the case far too much during the past decade."

22. The completion without difficulty of the railway between Toungoo and Mandalay may be mentioned among the works of great importance accomplished during the past three years. The line has now been open without interruption for nearly six months. The following are the figures of the gross earnings of the line since March 1889:

	Rs.
March . . . . .	1,41,789
April . . . . .	1,29,859
May . . . . .	1,56,484
June . . . . .	1,22,616
July . . . . .	1,16,955

Preparations have been made for the construction of a railway from Sagaing to Mogaung along the valley of the Mu river, which will be taken in hand as soon as the season permits. It is probable also that a reconnaissance will be made for the purpose of fixing on a line for a railway through the Shan States to China.

23. It may be as well to note that the action of the Government has not been confined to the suppression of disorder. Besides the large sums spent on the railway and on military works, the following sums have been spent in the civil department of public works:

UPPER BURMA.		Civil Buildings.	Communi-cations.	Irrigation.	Total.
<i>Original Works.</i>		Rs.	Rs.	Rs.	Rs.
Official year	{ 1887-88 . . . . .	8,84,621	16,60,634	35,300	25,80,555
	{ 1888-89 . . . . .	11,76,433	12,48,775	81,808	25,07,016
April 1889 . . . . .		18,774	69,858	4	88,636
May 1889 . . . . .		44,369	1,01,249	5,133	1,50,751
TOTAL WORKS . . . . .		21,24,197	30,80,516	1,22,245	53,26,958

A further sum of Rs. 3,83,935 was spent on miscellaneous public improvements and a sum of Rs. 5,12,544 on repairs, making in all a total of Rs. 62,23,437 expended on civil works.

Much has been done to open up communications. A cart-road is open from Mandalay to Maymyo, 42 miles, on the Shan plateau. The cart-road to the Ruby Mines, 64 miles, is nearly complete. The cart-road to Fort Stedman and the Southern Shan States, from the Meiktila road railway station *via* Hlaing-det, has made good progress. The hitherto completely landlocked country of the Yaw is being opened up both from the Irrawaddy and the Chindwin. Shwebo has been connected with the river. These are some of the works that

have been done. In almost every district proper court-houses have been provided and good jails or lock-ups have been built. The military police battalions have been everywhere comfortably sheltered and provided with hospitals.

24. The system of making agricultural advances has been extended to Upper Burma with good results. The people are beginning to see that the Government takes an interest in their welfare, and they have shown their gratitude by punctually fulfilling their obligations. In 1888-89 the following advances have been given for the purchase of seed and plough-cattle :

	Rs.
Pyinmana . . . . .	37,000
Pakòkku . . . . .	10,000
Minbu . . . . .	7,000
Magwe . . . . .	26,000
Shwebo . . . . .	20,000
Ruby Mines . . . . .	500
Sagaing . . . . .	20,000
Northern Shan States . . . . .	5,000
TOTAL . . . . .	1,25,500

In some districts the cattle have suffered from disease. But plenty of cattle are procurable by those who have money. Cattle suffered principally from smallpox and from rinderpest. The contagion is believed to have been brought from the Shan States, and was communicated to the village cattle owing to their mixing with the infected cattle in the village grazing-grounds. Ample security was given for all advances, which shows that the people of Upper Burma are not destitute, notwithstanding the losses which they must have sustained at the hands of dacoits and insurgents.

By order of the Chief Commissioner,

H. THIRKELL WHITE,

*Officiating Chief Secretary.*

*The 20th August, 1889.*

C. J. LYALL,

*Offg. Secretary to the Government of India.*

## GOVERNMENT OF INDIA.

## REVENUE AND AGRICULTURAL DEPARTMENT.

## WEATHER SUMMARY FOR AUGUST 1889.

*General Weather conditions of the month.*—The conditions of August are very similar to those of July. The monsoon currents usually prevail with great steadiness and extend over the greater part of the country. It is hence a month of frequent and in some districts of almost constant precipitation and of comparatively uniform temperature and high humidity. It is also usually the month of the greatest extension of the monsoon currents, and hence that in which Upper India obtains the largest amount of rain. Temperature hence falls to some extent in Sind and the West Punjab, which are in this, as in the three preceding months, the hottest districts of India. Pressure also tends to rise permanently in Upper India with the decrease of temperature, and before the end of the month the first indications of increasing weakness of the monsoon current are usually shown.

One of the most important features of the month is the position of the trough of low pressure in Northern India, the character of which was stated in last month's report. During the month of August last it generally occupied a somewhat more southerly position than usual, stretching across from Orissa to the Central Provinces and thence to Upper Sind.

A second important feature of the month is the small cyclonic storms which form at the head of the Bay and advance landwards. They always give more or less general rain, but its distribution depends largely upon the amount of concentration of the storm. If the depressions be shallow and extensive, the rainfall is generally moderate in amount and widely spread. If on the other they are deep and concentrated depressions, they give heavy or excessive rainfall to narrow belts of country at the expense of neighbouring districts, and are hence frequently a cause of several local floods and inundations.

The Bombay current has been stronger and steadier than usual during the month. Winds of force 9 (hard gale) have been reported from the centre of the Arabian Sea. The Bengal current (as measured by the strength of the winds) has on the other hand been feeble and more largely diverted to Burmah than usual. The storms of the month have been due to shallower and more extensive depressions than usual, and hence have given widely spread and moderate rain. In consequence of the pressure conditions these storms advanced in every case to the Central Provinces and thence to Central India, and hence those areas received frequent and abundant rain. There was no prolonged general break in the rains such as sometimes occurs in August. The month has hence been more or less favourable over the whole of India and the rainfall generally abundant and well distributed.

*Barometric depressions and cyclonic storms of the month.*—There were three depressions during the month, but they were shallower and more diffused than usually occur in the month of August.

(1) *Shallow depression of the 4th to the 11th August.*—The first indications of the formation of this depression were shown by the observations of the morning of the 4th, when the winds were shifting round to north-east on the Orissa and Bengal Coasts. The depression concentrated slightly during the day, and on the morning of the 5th a well marked moderate cyclonic circulation was established in the north-west angle of the Bay and adjacent coast districts. The centre crossed the Balasore Coast on the night of the 5th and moved westwards across Orissa into the Central Provinces on the 6th. The disturbance on the morning of the 7th covered the whole of the Central Provinces and part of Central India, the centre being a little to the east of Seoni. It now began to move slowly to the north-north-west, but was, as it had hitherto been, a shallow and

extensive depression. The centre was between Seoni and Saugor on the morning of the 8th and near Saugor on the 9th. It was then commencing to break up as the air motion was becoming irregular over the area of depression. The centre was midway between Saugor and Jhansi at 8 A.M. of the 10th. It filled up during the day after an existence of a week. This disturbance gave moderate rain to Bengal and Orissa during its earlier stages and a prolonged heavy burst of rain to the Central Provinces and eastern districts of Central India whilst it was advancing slowly northwards from Nagpur and Seoni to Jhansi. It recurved from west to north in the Central Provinces. It was throughout a shallow but somewhat extensive disturbance, and hence gave moderate and diffused rainfall over a large area rather than heavy concentrated rainfall over a narrow belt of country.

(2) *Shallow depression of 13th to the 20th of August.*—Almost immediately after the breaking up of the previous feeble storm the winds on the Bengal and Orissa Coasts shifted in the manner usually indicative of the commencement of the formation of a cyclonic storm in the north-west angle of the Bay. The indications of the storm were feeble from the 13th to the 15th, but on the morning of the 16th a shallow depression and moderate cyclonic circulation was established in the north-west angle of the Bay and adjacent coast districts. The centre crossed the coast near Saugor Island on the evening of the 16th, when it was advancing in a north-westerly direction. On the morning of the 17th the centre was a little to the south of Burdwan. The weather was now and during the next forty-eight hours stormy with heavy westerly gales over the whole of the north of the Bay. The centre moved more westerly than previously on the 17th and on the morning of the 18th was south of Benares. At that time the depression covered Behar, Chutia Nagpur, and the eastern districts of the North-Western Provinces. The centre advanced in a westerly direction during the next twenty-four hours and was a little to the north of Jhansi at 8 A.M. of the 19th. The depression had intensified to some extent, and during the previous day the cyclonic circulation was more vigorous than it had been since it crossed the Bengal Coast. Strong westerly winds blew across Central India and the Central Provinces and gave general rain to these areas at this time, whilst the easterly winds from the Bay of Bengal fell off in strength. The depression hence was almost stationary during the next twenty-four hours, the centre being a little to the north of Jhansi at 8 A.M. of the 20th. There were indications of the formation of a shallow depression at this time in Bengal and the humid winds from the Bay had hence ceased to feed into the depression. The winds from the Arabian Sea fell off rapidly during the day, and the depression hence filled up with unusual quickness on the evening of the 20th. Its existence extended over a period of eight days. It was a slightly more concentrated storm than the previous and gave a general burst of rain to Bengal, Orissa, Behar, the Central Provinces, and Central India.

(3) *Land formed depression of 21st to 28th August.*—As already noted, there was a tendency to the formation of a shallow depression in Bengal shown by the barometer and wind observations of the 20th. A very shallow depression covered that area on the morning of the 21st. It moved very slowly to the west-south-west during the next three days, but showed no signs of concentration. It then advanced westwards into the Central Provinces on the 26th and filled up in that area on the 28th. It was hence throughout a very shallow and diffused depression of comparatively little importance. It gave moderate rain over a large area, including Bengal, Behar, the Central Provinces, and eastern districts of the North-Western Provinces.

*Pressure.*—The chief barometric movements occurred in connection with the feeble cyclonic storms described above. As they were shallower than usual, the pressure changes were somewhat less marked than is generally the case in August. The following table gives the larger oscillations of the barometric differences between Southern and Upper India during the month. They indicate roughly the variations in the general strength of the monsoon currents (more especially the Bombay current) blowing into India during the month :

Date.	Highest Pressure in Southern India or Ceylon.	Lowest Pressure in Upper India.	Range of Pressure or total gradient over 1 in
1st	29.78"	29.52"	.26"
4th	29.80"	29.38"	.42"
12th	29.85"	29.56"	.29"
18th	29.87"	29.37"	.50"
27th	29.82"	29.52"	.30"
29th	29.86"	29.51"	.35"
31st	29.89"	29.59"	.30"

The average range of pressure over India in the month of August is slightly less than a third of an inch, and the average for the past month was slightly greater, and was associated with a strong monsoon current from the Arabian Sea.

The mean pressure of the month of the whole of India was .018" in defect.

The following table gives the barometric anomalies or local pressure variations in different parts of the country and those of June and July for comparison :

PROVINCE.	BAROMETRIC ANOMALY.		
	June 1889.	July 1889.	August 1889.
Burmah	+ .011	+ .004	+ .008
Bengal	+ .008	+ .017	— .014
Assam	+ .019	+ .019	+ .002
Behar and Chutia Nagpur	+ .006	+ .019	— .007
North-Western Provinces	+ .003	+ .015	+ .005
Punjab	— .016	— .004	+ .019
Sind and Rajputana	— .013	+ .005	+ .005
Central India	— .001	+ .012	— .001
Central Provinces	— .004	+ .005	— .048
Bombay	— .001	— .025	+ .002
Madras	— .002	— .026	+ .012

The preceding table shows that the pressure relations changed considerably during the month of August. The most important features were the great deficiency in the Central Provinces and Berar and the excess in Upper India. The deficiency was absolutely greatest at the following stations :

Stations.	Deficiency.
Seoni	.074
Hoshangabad	.072
Jubbulpore	.064
Nagpur	.055

The excess in Upper India was greatest at Peshawar (.033").

*Temperature.*—The temperature conditions of the month do not call for much remark. The month was one of fairly steady rainfall over by far the greater part of the country, and the variations of the temperature from the normal were hence generally small in amount. The variation of the mean

temperature from the normal from week to week and for the whole month is shown for different districts in the following table :

PROVINCE.	DIFFERENCE OF MEAN TEMPERATURE FROM NORMAL FOR WEEK ENDING AUGUST				Difference of Mean Temperature from the Normal for the Month.
	5th.	12th.	19th.	26th.	
Burmah . . . . .	+1·5	+0·6	+0·4	—0·8	+0·2
Bengal . . . . .	+0·9	+1·2	+0·6	+0·5	+0·7
North-Western Provinces .	—1·2	+2·2	—0·3	+0·3	+0·1
Punjab . . . . .	+0·4	+1·1	—1·4	+0·6	+0·1
Bombay . . . . .	+1·8	+0·7	+0·3	+0·6	+0·7
Central Provinces and Berar.	+1·8	—0·6	—1·9	—1·1	—0·9
Guzerat and Central India .	+1·7	+0·5	—1·2	—0·9	—0·1
Sind and Rajputana . . .	+2·9	+1·2	+0·5	—0·9	+0·8
Madras . . . . .	—0·2	—0·1	0	—0·2	0

The variation of the average temperature of the month from the normal was hence less than 1° in all districts.

The hottest part of India during the month included Upper Sind and the West Punjab.

The following were the highest temperatures registered in that area during the month :

Jacobabad . . . . .	112·2° on the 8th.
Multan . . . . .	111·2° " "
Dera Ismail Khan . . . . .	108·5° " 7th.
Peshawar . . . . .	108·5° " 6th.
Lahore . . . . .	105·6° " 5th.

**Rainfall.**—As already noted, there were fewer cyclonic storms than usual during the month. The three which occurred were much shallower and more extensive and diffused depressions than usual. Hence the rainfall of the month was on the whole very uniformly distributed. The Arabian Sea current blew with unusual steadiness during the month, whilst the Bengal current was below its normal force.

During the first week of the month the rainfall was normal or slightly in excess over the whole of India, with the exception of Sind, Rajputana and the Punjab, in which the rainfall was unusually scanty. The hottest temperatures of the month were recorded in Upper India at the end of this dry period. In the second week of the month larger amounts of rain were generally recorded. The Central Provinces and Central India received abundant rain from the storm which passed through them. The Punjab and Rajputana obtained moderate rain during the latter part of the week, chiefly from the Bombay current. In other districts the rainfall was generally slightly in excess.

The storm of the third week of the month gave rise for some time to strong winds of indraught from the Arabian Sea and Bay of Bengal, and hence general and favourable rain fell over nearly the whole country. The Central Provinces, Central India, and East Rajputana received the most abundant rain from the storm. Frequent showers fell in the Punjab, but the total amounts were generally below the average.

During the last week of the month the rainfall was larger than hitherto in Northern India, whilst smaller amounts fell in Southern and Central India. The districts of most abundant rainfall during the week were the North-Western Provinces and the eastern districts of Rajputana and Central India.

The rainfall of the month has hence on the whole been favourably distributed. It was in excess over nearly the whole of the interior and in moderate defect in the coast districts, where deficiency is least prejudicial. There was a moderate excess in Lower Burmah averaging 4·6 inches, and a deficiency ranging from 3·6 inches to 4·9 inches in Bengal, Assam and Chutia Nagpur. In Behar the rainfall of the month was very slightly below the normal. It was in excess over the whole of the North-Western Provinces (with some local exceptions), the Punjab, Rajputana, Central India, Berar, and the Central Provinces. The southern half of the Central Provinces received 7·14 inches, or 58 per cent. more than its normal amount. The rainfall of the month was deficient in the West Coast districts of Guzerat and the Konkan, and also in Hyderabad, but nowhere does the deficiency appear to have been large in amount except perhaps locally in some parts of the North Bombay Deccan. Over the whole of Southern India, including Malabar, Mysore and the Carnatic, there was a moderate excess.

The following table gives complete data, and shows the actual average rainfall and the normal rainfall of the month of the twenty-one districts into which the country is divided, so far as it is indicated by the telegraphic reports of a few stations in each district.

DISTRICTS.	Number of Stations.	Normal Average Rainfall in August.	Actual Average Rainfall in August 1889.	Difference from the Average in August 1889.
Punjab, West . . . . .	7	5·94	6·40	+ 0·46
" East . . . . .	4	9·42	10·81	+ 1·39
North-Western Provinces, Trans-Gangetic . . . . .	8	13·95	18·69	+ 4·74
" " Cis-Gangetic . . . . .	3	10·53	9·96	— 0·57
Behar . . . . .	2	12·75	11·96	— 0·79
North Bengal . . . . .	3	18·99	14·11	— 4·88
Assam—Cachar . . . . .	3	16·02	12·21	— 3·81
Lower Bengal and Chutia Nagpur . . . . .	8	14·30	10·67	— 3·63
Orissa—North Circars . . . . .	5	9·56	10·37	+ 0·81
Central Provinces, South . . . . .	7	12·34	19·48	+ 7·14
Berar—Khandeish . . . . .	2	6·78	8·31	+ 1·53
Rajputana, Central India, Saugor, and Nerbudda . . . . .	9	11·89	16·30	+ 4·41
Sind—Cutch . . . . .	3	1·99	2·03	+ 0·04
Guzerat . . . . .	3	7·70	5·30	— 2·40
Konkan . . . . .	4	15·30	9·49	— 5·81
Deccan—Hyderabad . . . . .	5	6·59	4·95	— 1·64
Malabar . . . . .	5	20·69	21·76	+ 1·07
Mysore—Bellary . . . . .	4	5·06	5·46	+ 0·40
Carnatic . . . . .	6	4·04	5·13	+ 1·09
Lower Burmah . . . . .	7	25·01	29·63	+ 4·62
Ceylon . . . . .	1	5·22	4·49	— 0·73

JOHN ELIOT,

*Meteorological Reporter to the  
Government of India.*

SIMLA, 27th September, 1889.

E. C. BUCK,

*Secretary to the Government of India.*

## GOVERNMENT OF INDIA.

## REVENUE AND AGRICULTURAL DEPARTMENT.

**Weather Review of India for the week ending at 8 a.m. on  
Monday, September 30th, 1889.**

The meteorological changes of the past week have exhibited a steady advance towards cold weather conditions, the rainfall area has contracted and the fine settled conditions which in the preceding week were confined to North-Western India spread eastward and southward so as by the end of the week to include nearly the whole of the Indian region except Burmah and Assam. The Commander of the Mail Steamer which crossed the Arabian Sea during the week experienced light to moderate westerly to southerly winds and fine weather during the passage. Hence it may fairly be concluded that so far as the greater part of the Indian region is concerned the monsoon season of 1889 is ended, and that the period of calms and light variable breezes which annually precedes the appearance of the north-east monsoon is apparently setting in. In the extreme south there is still a certain amount of monsoon current which at the close of the week swept across Ceylon and the Bay and gave general rain to Burmah, South-East Bengal and Assam, but this was the only region where anything approaching monsoon conditions prevailed. A very feeble low pressure area was established over the Bay, Burmah and Lower Bengal on the 25th, and for a time conditions were favourable to the formation of a considerable depression, but the barometer rose on the 26th and the depression slowly moved northward into Bengal, where it filled up.

On the 24th pressure was high on the Malabar Coast, low in Sind, and low within a large area which enclosed Bengal, the North-Western Provinces, the Circars and the north of the Bay. The winds varied largely in direction. There was a fairly steady westerly and south-westerly current across the Sind and Guzerat Coasts into Rajputana, a north-westerly current in the Central Provinces, and a south-easterly and easterly current along the foot of the hills. Elsewhere the directions were very variable. On the 25th a well marked but shallow depression overlay the Bay, Burmah and Bengal. The barometric depression was however apparently very slight, and beyond north-easterly winds in Bengal there was very little trace of cyclonic movement. Light easterly and south-easterly winds prevailed along the foot of the hills and north-westerly to westerly winds over the central parts of the country and the Gangetic plain, but elsewhere the directions were very variable. On the 26th the barometer was rising generally, but owing to the comparatively slight increase over the Bay, the depression in that region was somewhat more strongly marked than on the previous day, more particularly to the southward, where gradients were moderately steep and where probably a moderately strong monsoon current was blowing. Cyclonic movements around the Bay were more marked than on the preceding day, there being a general indraught from the shores towards the centre of the Bay. A north-westerly and westerly current is blowing down the Gangetic plain and variable breezes over the Peninsula. The Chart of the 27th showed that the depression had moved quickly northward and lay over Bengal and that it had become very much smaller. The cyclonic movements over the Bay had consequently disappeared and westerly and west-north-westerly winds prevailed over Northern India, south-easterly and easterly winds in Burmah, and calms and variable winds in the Peninsula and at the central stations. Gradients were still moderately steep in the south, and a fairly strong monsoon current prevailed at Colombo and across the south of the Bay. On the 28th the general features of the pressure distribution were the same, readings decreasing from a high pressure area overlying the Malabar Coast and the south of the Bay to a low pressure area over Bengal. Over the Peninsula calms and variable breezes still prevailed, but over the greater part of India there was a fairly general westerly or west-north-westerly current,

and over Burmah winds from south-west to south-east. In Ceylon and across the south of the Bay a fairly strong monsoon current still prevailed. On the 29th pressure fell over North-Western India, while it rose slowly over the Peninsula. In consequence barometric gradients became steeper generally and much of the variability which had previously characterised the wind directions disappeared, and a fairly general westerly or west-north-westerly current prevailed over a large part of India. In Burmah the wind was south-westerly and south-easterly. On the 30th the barometer had risen briskly over Northern India and slightly in the south. Hence the gradient had decreased and the wind, more particularly over the Peninsula and the central parts of the country, become again variable. In Northern India the wind was west-south-westerly and in Burmah southerly and south-westerly.

*Temperature.*—Most of the variations of temperature from the mean during the past week have been due to the varying amount of rain received in the different Provinces compared with the average, but the relative coolness of the Punjab and North-Western Provinces is due to other causes. The day temperatures over the region including the North-Western Provinces, the north of Rajputana, the Punjab, Upper Sind, and Baluchistan have on nearly all days exceeded the normal average, but the night temperatures, owing probably to extreme dryness of the air permitting excessive radiation, have been largely below the average, and hence the mean of the day and night observations over this region exhibits a deficiency. In the other Provinces, as stated above, the variations of temperature coincide roughly with the variations of rainfall. Thus in Burmah the earlier days, when rain was slight, were warmer and the latter days, when rain was heavy, were cooler than usual. In Bengal, where rain ceased on the 24th, one day was cooler and six warmer than the average. Bombay and Sind showed the same proportion, and the Central Provinces and Central India were warmer than the average throughout. Madras, where there was a good deal of rain, was cooler than usual. The warmest day was the 26th, when only two Provinces, *viz.*, the Punjab and Madras, reported any deficiency of heat. Maxima exceeding 100° were recorded in several parts of North-Western India throughout the week, the highest reading being 105·4° at Jacobabad on the 24th.

The following table shows the amount of excess or defect of the mean average temperature of the different Provinces for the present and for the preceding week:

PROVINCES.	Difference of Mean Temperature of Last Week from Normal.	Difference of Mean Temperature of Present Week from Normal.
Burmah . . . . .	— 0·1°	— 1·0°
Bengal . . . . .	— 0·9°	+ 1·0°
North-Western Provinces . . . . .	+ 0·2°	— 0·7°
Punjab . . . . .	+ 1·0°	— 0·8°
Bombay . . . . .	+ 2·0°	+ 0·9°
Central Provinces . . . . .	+ 2·2°	+ 2·1°
Guzerat and Central India . . . . .	+ 2·9°	+ 1·6°
Sind and Rajputana . . . . .	+ 3·5°	+ 0·5°
Madras . . . . .	— 0·7°	— 0·9°

This table shows that except in Bengal the weather has on the whole, and relatively to the average, been cooler during the present than during the past week.

*Rain.*—As mentioned above, the amount and extent of rainfall have both decreased during the past week. The rainbearing monsoon current has practically ceased except in the extreme south, and there have been no travelling cyclones such as occasionally carry heavy rain over a large tract of country. Hence conditions have been generally unfavourable to rainfall and the most part of the rain shown in the concluding table is due to showers.

The following is a brief description of the daily distribution of rainfall:

On the 24th a few slight showers were reported from parts of the Punjab and general rain from Lower Bengal, Assam, Lower Burmah and the whole of the

Peninsula south of Vizagapatam on the one side and Ratnagiri on the other. On the South-West Coast the amounts were large. On the 25th rain had ceased in the north-west and almost ceased in Bengal, but in Burmah and the Peninsula general rain continued. A similar distribution prevailed on the 26th, 27th, 28th, and 29th, the amount of rain over the Peninsula steadily becoming less, though the extent of the rainfall area remained little altered. On the 30th rain practically ceased over the Peninsula. It continued to fall in Burmah, and a patch of rain also occurred over the Central Provinces.

The concluding table shows that the rainfall of the week was in excess at only sixteen of the rainfall districts and in defect at thirty-two districts, while in two there was no variation from the average. Sind and Chutia Nagpur have received no rainfall whatever. In the former division none is expected and the defect is unimportant, but in Chutia Nagpur the normal fall is about  $1\frac{1}{2}$  inch. In the Punjab the average rainfall throughout the whole Province is less than  $\frac{1}{10}$  of an inch, and in some districts in that Province the deficiency is large. In the North-Western Provinces and Rajputana the rainfall has been almost equally scanty both absolutely and relatively to the average. In contrast with these scanty rainfalls are the rainfalls of Tenasserim, Arakan and the west of the Peninsula, where the amount of rain received during the week has been from two to three times the normal.

The whole of Burmah and the Surma Valley of Assam have received excessive rain, the excess in Tenasserim and Arakan being large and in Cachar and Lower Burmah small. The whole of Northern India, comprising Bengal, the North-Western Provinces, the Punjab and Rajputana, has on the contrary received a short supply, the deficiency ranging from only a few hundredths in parts of the Punjab to as much as 3 inches in North Bengal. The rainfall of the west of the Peninsula comprising the divisions of Malabar, Coorg, Mysore, the Konkan and the Bombay Deccan, as well as northward over Khandeish and the west of the Central Provinces, has been everywhere in excess of the average. The heaviest fall relatively to the average was in the Konkan, where the amount was three times the average. In the central parts of the country including Berar, the greater part of the Central Provinces, Central India, Kathiawar and Guzerat the rainfall was more or less short; but as the amount ordinarily received over the greater part of this district is not large at this season, the deficiency is probably unimportant. Over the east of the Peninsula the rainfall in relation to the average varies a good deal, excessive falls being reported from Jeypore (Madras), Hyderabad, and the centre and south of the East Coast, and defective falls from the Circars and Central and South Madras.

The returns of maximum falls now show very few large amounts. In Tenasserim one station received 21 and another 18 inches of rain during the week, but these amounts were exceptional, and in other parts of Burmah there were no heavy amounts recorded. Cherrapunji received only  $4\frac{1}{2}$  inches and in most of the other districts in Bengal and Assam the falls were proportionately low; but in some parts of Behar amounts varying between 3 and 9 inches were reported. In the North-Western Provinces, the Punjab, Rajputana, Sind and Guzerat there were hardly any stations the total rainfall of which exceeded 1 inch; but in the central parts of the North-Western Provinces there was a local patch of rain where the week's amounts varied between 2 and 6 inches. In the West Coast districts there were several instances of heavy falls, the largest being 15 inches at Karwar and  $10\frac{1}{2}$  inches at Cannanore. In the central parts of the country the falls were fairly large, and in Madras they varied between 2 and 7 inches.

The state of the seasonal rainfall is shown in the concluding column of the table. The following are the divisions in which the total rainfall since the middle of May is deficient by amounts exceeding 10 per cent. :—Lower and Central Burmah, East and Deltaic Bengal, the west of the North-Western Provinces, the Central, Submontane, Hill and north-west districts of the Punjab, Khandeish, Guzerat, Sind and Rajputana West. Of these the only addition since last week is Deltaic Bengal.

PROVINCE.	DIVISION.	RAINFALL DATA FOR WEEK ENDING SEPTEMBER 30TH, 1889.			RAINFALL DATA FROM MAY 1ST TO SEPTEMBER 30TH, 1889.		
		Average Actual Rainfall of Division.	Average Nor- mal Rainfall of Division.	Excess or Defect, in Inches.	Average Actual Rainfall of Season to date.	Average Nor- mal Rainfall, May 1st to September 30th.	Excess or De- fect of (Season- al) Rainfall expressed as a per- centage.
		Inches.	Inches.	Inches.	Inches.	Inches.	Per cent.
BURMAH . . .	Tenasserim . . . . .	15'38	5'18	+ 10'20	181'04	170'47	+ 6
	Lower Burmah . . . . .	4'33	3'22	+ 1'11	71'77	86'23	- 17
	Central Burmah . . . . .	3'41	2'59	+ 0'82	55'11	68'96	- 20
	Upper Burmah . . . . .	3'46	?	?	28'60	?	?
	Arakan . . . . .	6'68	3'21	+ 3'47	164'64	171'67	- 4
BENGAL AND ASSAM . . . . .	Eastern Bengal . . . . .	1'45	2'45	- 1'00	64'94	75'47	- 14
	Assam (Surma) . . . . .	4'03	3'92	+ 0'16	114'39	90'09	+ 27
	Do. (Brahmaputra) . . . . .	2'15	2'50	- 0'35	93'82	77'03	+ 22
	Deltaic Bengal . . . . .	0'36	1'42	- 1'06	42'47	49'08	- 11
	Central Bengal . . . . .	0'43	1'90	- 1'47	40'68	47'93	- 3
	North Bengal . . . . .	1'11	3'95	- 2'84	90'40	87'96	+ 7
	Orissa . . . . .	0'46	1'80	- 1'34	41'32	45'44	- 1
	Chutia Nagpur . . . . .	0	1'39	- 1'39	42'22	44'92	- 6
	Behar (South) . . . . .	0'55	1'93	- 1'38	40'33	37'86	+ 7
	Do. (North) . . . . .	1'36	2'15	- 0'79	52'58	43'32	+ 21
NORTH - WESTERN PROVINCES AND ODDH. . . . .	North - Western Provinces (East). . . . .	0'19	0'94	- 0'84	43'70	32'67	+ 34
	Oudh (South) . . . . .	0'20	0'91	- 0'71	40'43	33'01	+ 22
	Do. (North) . . . . .	0'10	1'17	- 1'07	42'21	35'04	+ 18
	North - Western Provinces (Central). . . . .	0'49	0'49	0	26'98	28'19	- 4
	North - Western Provinces (West). . . . .	0'03	0'25	- 0'22	21'64	25'57	- 15
	North - Western Provinces (Submontane). . . . .	0'09	0'97	- 0'88	48'54	38'99	+ 25
PUNJAB . . . . .	Punjab (South) . . . . .	0'19	0'22	- 0'03	11'62	12'29	- 4
	Do. (Central) . . . . .	0'06	0'25	- 0'19	16'75	21'09	- 21
	Do. (Submontane) . . . . .	0'03	0'56	- 0'53	20'32	24'62	- 17
	Do. (Hill Districts) . . . . .	0'05	1'93	- 1'88	59'28	77'35	- 23
	Do. (North-West) . . . . .	0'11	0'32	- 0'21	16'09	18'42	- 13
	Do. (West) . . . . .	0'01	0'12	- 0'11	6'72	6'53	+ 3
BOMBAY AND MALA- BAR COAST DIS- TRICTS (MADRAS). . . . .	Malabar . . . . .	4'34	2'16	+ 2'18	103'03	97'11	+ 6
	Madras (South Central) . . . . .	1'05	1'31	- 0'26	31'53	15'50	+ 110
	Coorg . . . . .	5'23	2'61	+ 2'62	99'01	94'84	+ 7
	Mysore . . . . .	2'03	1'11	+ 1'53	21'54	19'25	+ 12
	Konkan . . . . .	5'23	1'76	+ 3'47	122'89	93'94	+ 31
	Bombay Deccan . . . . .	3'58	1'29	+ 2'29	28'56	27'12	+ 5
	Hyderabad (North) . . . . .	...	...	...	...	...	...
	Khandeish . . . . .	2'51	1'51	+ 1'00	19'44	22'28	- 13
CENTRAL PROVINCES AND BERAR. . . . .	Berar . . . . .	1'09	1'59	- 0'50	30'64	30'35	+ 1
	Central Provinces (West) . . . . .	1'14	1'05	+ 0'09	34'37	31'29	+ 10
	Ditto (Central) . . . . .	0'21	1'00	- 0'79	49'84	48'00	+ 4
	Ditto (East) . . . . .	1'15	1'34	- 0'19	53'09	47'46	+ 12
BOMBAY (NORTH) . . . . .	Guzerat . . . . .	0'29	1'05	- 0'76	33'63	37'89	- 11
	Kathiawar . . . . .	0'20	0'26	- 0'06	26'05	26'34	- 1
	Sind . . . . .	0	0	0	1'50	4'39	- 64
RAJPUTANA AND CEN- TRAL INDIA. . . . .	Central India (East) . . . . .	0'30	1'19	- 0'89	37'31	34'56	+ 8
	Rajputana (East), Central India (West). . . . .	0'05	0'54	- 0'49	26'51	25'41	+ 12
	Rajputana (West) . . . . .	0'12	0'21	- 0'09	8'73	12'89	- 32
MADRAS . . . . .	East Coast (North) . . . . .	0'54	1'76	- 1'22	31'95	24'53	+ 30
	Do. (North) . . . . .	2'20	1'13	+ 1'07	34'85	35'51	- 2
	Hyderabad (South) . . . . .	1'19	1'00	+ 0'19	22'05	20'01	+ 17
	Madras (Central) . . . . .	1'45	1'72	- 0'27	21'39	16'91	+ 26
	East Coast (Central) . . . . .	1'56	1'41	+ 0'15	18'53	17'91	+ 3
	Ditto (South) . . . . .	2'13	1'17	+ 0'96	18'05	15'33	+ 22
	Madras (South) . . . . .	0'14	0'88	- 0'74	9'31	8'37	+ 11

W. L. DALLAS,

SIMLA, 3rd October, 1889.

Assistant Meteorological Reporter to the  
Government of India.

E. C. BUCK,

Secretary to the Government of India.

F

## GOVERNMENT OF INDIA.

## REVENUE AND AGRICULTURAL DEPARTMENT.

## Weekly Report on the State of the Season and Prospects of the Crops.

**Madras.**—*For week ending 28th September.*—Rainfall fair and general; slight in Madras, Tinnevely and Coimbatore. Crops generally good, but dry crops suffering from excessive rain in parts of Kistna, Bellary and Anantapur; damaged by floods in Kurnool, and withering from want of rain or water in parts of Chingleput and South Arcot. Prices rising in five districts, falling in eleven, and stationary in others. Labourers employed on last day of week on Rushikulya works, 3,618; Gopalpore Canal, 744; Ghat Roads, 3,971; other minor works, 6,376. Number on village relief on 21st September, 38,222, including 23,090 children; fed in kitchens, 10,628, including 7,645 children. Imports into Ganjam during week by sea and land, 686 tons. General prospects favourable.

**Bombay.**—*For week ending 2nd October.*—Rain during week good and beneficial to crops and fodder throughout the Deccan, Southern Mahratta Country, and Ratnagiri; moderate or slight in other districts of the Presidency Proper. More rain needed in one taluka of Khandesh and parts of Guzerat, Nasik, Thana and Colaba. Standing crops damaged by locusts almost throughout Sind and in parts of Ahmedabad, Khandesh and Baroda. Cotton blighted in parts of Hyderabad, and *bajri* damaged by excessive rain in one taluka of Poona. Crops otherwise good except in one taluka of Khandesh. Sowing of late crops retarded by excessive rain in parts of Ahmednagar and Dharwar; progressing in other districts. Fodder scarce in parts of Dharwar.

**Bengal.**—*For week ending 1st October.*—Practically no rainfall during the week except in the eastern districts and Darjeeling. The break has been beneficial in the northern districts, where heavy rain fell in the previous week; but more rain is wanted in some of the western districts and in Balasore and Singhbhum. Winter rice is generally promising except in parts of Burdwan, Hughli and Balasore where the rainfall has been scanty, and in places in Central and Northern Bengal where some damage has been done by floods. The floods in Murshidabad, Nadiya, and Jessore are subsiding rapidly. Harvesting of early rice, jute and other autumn crops is nearly over, and cultivation for *rabi* crops has begun. Sugarcane is generally in fair condition. Scarcity of fodder reported in some places in Dacca and in the east of Bogra. Sufficient foodstocks in the affected tracts. In Chumparun and Muzaffarpur loans and charitable reliefs are being given, but in the latter district the demand for charity is decreasing. In Midnapur 349 persons received charity during the past week.

**North-Western Provinces and Oudh.**—*For week ending 2nd October.*—The weather has been bright and seasonable. More rain is wanted in some places. *Kharif* harvesting continues; a good outturn expected. Ploughing for and sowing of the *rabi* are in progress. Markets are well supplied, and prices remain steady or show a tendency to fall.

**Punjab.**—*For week ending 2nd October.*—Slight rain has fallen in Ferozepore and Rawalpindi districts. Prices unsettled in Sialkot, rising in Rawalpindi, and stationary elsewhere. Harvesting of *kharif* crops commenced in certain districts; ploughings for *rabi* sowings commenced. Rain much wanted throughout the Province. Standing crops are reported to be generally good. *Kharif* outturn below average in Umballa. Locust swarms were frequent lately in Mooltan, but did no great damage. Fodder is sufficient everywhere.

**Central Provinces.**—*For week ending 2nd October.*—Weather cloudy and close, with occasional heavy showers in a few districts; more rain would be

beneficial in Jubbulpore and Bilaspur, but the prospects of the *kharif* crops are generally very good. Ground being ploughed for *rabi* sowings. Linseed sowing commencing in Chhattisgarh. Prices steady.

**Burma.**—*For week ending 28th September.*—There has been a fair fall of rain throughout Lower Burma, and agricultural prospects are good in all districts. In Upper Burma more rain is wanted in Shwebo; in other districts the fall is reported to have been sufficient and the crop prospect is fair. In Lower Burma the price of paddy has fallen slightly in Akyab, Thongwa, Thayetmyo, Amherst and Mergui, and risen slightly in Tharrawaddy and Henzada; in other districts the price is unchanged. In Upper Burma the price has risen slightly in Shwebo; in the other districts there are no fluctuations. The foodsupply is sufficient throughout the Province.

**Assam.**—*For week ending 2nd October.*—Weather seasonable. Rainfall light. Reaping of early and transplanting of late rice nearly over. Tea and other crops generally doing well.

**Mysore and Coorg.**—*For week ending 2nd October.*—Rain in the Civil and Military Station of Bangalore 5·38 inches. Rainfall good throughout the State. Condition of crops and prospects good. No material change in prices.

Rainfall 2·73 inches in Coorg. *Ragi* crops damaged by unseasonable rains; other crops in good condition.

**Berar and Hyderabad.**—*For week ending 2nd October.*—Average rainfall 1·10 inch in Berar. Weather warm and cloudy. Crops in good condition. Fodder sufficient. Prices of foodgrains stationary. Cattle free from disease.

Rainfall in Hyderabad during the week 3·4 inches. Total since 1st January 32·7 inches. *Abi* crops prospering. Harvesting of some *kharif* crops commenced. Prices stationary.

**Central India.**—*For week ending 2nd October.*—Rain slight and partial; more wanted in Bundelkhand, elsewhere sufficient. Crops generally good. Prices falling in Goona and parts of Bhopawar; steady elsewhere.

**Rajputana.**—*For week ending 2nd October.*—Slight rain in a few places. Standing crops slightly damaged by locusts in Meywar, Jeypore, and Marwar. Rain much needed in Kerowlee, Harowtee, Ulwar, and Sirohi. Agricultural stock good. Pasturage sufficient. Fodder dear in Marwar. Prices steady generally.

**Nepal.**—*For week ending 26th September.*—Unusually heavy rainfall during two days. No damage however to the ripening crops. Prospects remain very good.

E. C. BUCK,  
Secretary to the Government of India.

GOVERNMENT OF INDIA.  
PUBLIC WORKS DEPARTMENT.  
RAILWAY TRAFFIC.

No. XXIII. OF 1889-90.

APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used as far as possible.

		WEEK ENDING 8TH SEPTEMBER 1888.		WEEK ENDING 7TH SEPTEMBER 1889.		TOTAL RECEIPTS FROM 1ST APRIL TO 8TH SEPTEMBER 1888.		TOTAL RECEIPTS FROM 1ST APRIL TO 7TH SEPTEMBER 1889.		Total increase in 1889-90.		Total decrease in 1889-90.	
Latest Return received.	RAILWAYS.	Total mean length open.	Receipts.		Total mean length open.	Receipts.		Total.	Per mile open per week.	Total.	Per mile open per week.	Rs.	Rs.
			Total.	Per mile open.		Total.	Per mile open.						
			Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
State Lines worked by Companies.													
14th September 1889	East Indian (a)	1,526	6,77,883	444	1,526	6,97,728	457	1,84,68,207	527	1,89,29,603	540	4,31,396	...
14th ditto	Patna-Gya.	57	7,448	131	57	7,475	131	1,33,878	140	1,88,233	143	4,355	...
.....	Dildarnagar-Ghazipur	.....	(b)	.....	.....	(b)	.....	(b)	.....	(b)	.....	.....	...
.....	Sindia	75	4,848	65	.....	(c)	.....	1,03,410	95	(c)	.....	.....	1,03,410
14th September 1889	Rajputana-Malwa	1,904	3,33,944	204	1,672	2,32,000	130	78,27,646	205	86,85,593	228	8,57,947	...
14th ditto	Bengal Nagpur (d)	180	17,507	94	305	(e) 21,107	71	6,07,374	103	(e) 8,02,060	117	1,05,280	...
14th ditto	Southern Mahratta (f)	850	68,651	81	850	54,948	64	17,34,841	89	18,57,418	94	1,22,576	...
14th ditto	Do. Mysore Section	140	10,871	78	296	17,418	59	2,40,436	75	3,39,616	64	99,180	...
7th ditto	Indian Midland	130	7,927	58	740	(g) 41,475	56	3,20,572	102	(g) 12,18,804	82	8,98,232	...
7th ditto	Villupuram-Dharmavaram (Nellore Branch)	83	5,133	62	83	4,418	53	1,12,405	59	1,10,773	58	...	1,632
7th ditto	Bareilly-Pilibhit.	30	1,151	32	30	1,175	33	34,791	44	42,850	54	8,082	...
	TOTAL	4,753	11,41,369	240	5,577	10,78,254	193	2,98,13,338	273	3,21,75,550	260	23,62,012	...
State Lines worked by Government.													
14th September 1889	North Western (h)	2,462	5,70,510	231	2,386	4,78,627	201	1,06,52,356	188	1,18,21,095	217	11,68,739	...
14th ditto	Oudh and Rohilkhand	692	1,03,141	150	692	94,204	130	30,62,310	192	34,37,661	210	3,75,351	...
7th ditto	Bengal Central	125	20,370	103	125	15,370	123	2,78,915	97	3,13,709	109	34,794	...
14th ditto	Wardha Coal	45	11,103	248	45	7,880	173	3,23,706	343	3,40,931	331	17,225	...
7th ditto	Eastern Bengal	673	2,53,385	379	747	2,60,980	300	38,44,737	248	41,79,801	258	3,37,064	...
14th ditto	Nalhati	7	1,250	47	47	1,832	68	43,051	70	43,181	70	...	470
14th ditto	Tinohati	459	25,179	97	273	24,405	82	7,30,945	128	8,51,007	144	1,20,063	...
14th ditto	Lucknow-Sitapur	105	4,183	40	105	4,234	40	1,13,240	47	1,49,262	62	36,016	...
7th ditto	Sihramau	45	1,451	50	25	1,090	65	27,056	47	28,184	49	1,120	...
7th ditto	Jorhat	7	242	35	7	...	44	...	13	3,117	19	1,060	...
7th ditto	Cherra-Companyganj	392	41,123	105	583	72,431	131	12,71,121	145	19,49,135	153	6,67,017	...
7th ditto	Burma (i)												...
	TOTAL	4,809	10,32,403	214	4,085	9,70,019	195	2,05,50,100	183	2,31,08,084	204	27,57,984	...
Lines worked by Guaranteed Companies.													
14th September 1889	Madras	840	1,59,516	100	840	1,58,662	189	37,51,763	191	40,97,423	213	3,45,660	...
7th ditto	South Indian	654	1,10,334	109	654	1,14,712	170	24,92,129	160	26,10,493	175	1,18,104	...
14th ditto	Great Indian Peninsula	1,497	(j) 5,40,504	301	1,440	(k) 3,90,730	271	1,90,85,902	533	1,44,80,540	480	...	45,92,356
7th ditto	Bombay, Baroda and Central India (l)	461	2,22,525	483	461	1,55,000	336	55,01,814	519	57,36,381	544	2,34,567	...
	TOTAL	3,452	10,32,920	299	3,805	8,19,310	241	3,08,31,808	388	2,69,30,843	347	...	3,00,468
GRAND TOTAL (GUARANTEED AND STATE)													
GROSS ESTIMATED EXPENSES		...	...	...	...	...	...	4,24,61,725	142	4,79,71,044	137	5,10,319	...
NET RECEIPTS		...	...	...	...	...	...	3,85,34,721	129	3,92,43,433	125	7,02,712	...
Assisted Companies.													
14th September 1889	Tarakeshwar	22	3,850	175	22	4,162	189	1,26,225	241	1,29,871	257	3,185	...
31st August 1889	Dibru Sadia	...	...	...	...	(m)	...	(n) 1,88,254	110	(o) 2,10,857	123	22,003	...
14th September 1889	Bengal and North-Western	376	28,194	75	376	26,670	71	10,97,161	126	11,62,401	131	63,240	...
7th ditto	Rohilkhand-Kumaun	67	4,094	74	67	6,166	92	1,57,772	107	1,71,051	110	13,279	...
	TOTAL	405	37,003	80	465	30,998	80	15,69,413	120	16,72,720	130	1,04,307	...
Native States.													
14th September 1889	His Highness the Nizam's Guaranteed	310	33,153	107	354	41,868	118	7,13,461	109	9,88,897	122	2,75,436	...
14th ditto	His Highness the Gaekwar's	59	1,927	33	59	2,260	33	59,327	44	59,434	44	107	...
14th ditto	His Highness the Gaekwar's Veranganj-Mehsana-Vadnagar	21	759	30	27	650	24	20,992	43	24,962	40	3,970	...
14th ditto	Bhavnagar-Gondal-Junagadh Porbandar	209	14,006	71	201	15,846	61	4,42,220	90	6,06,812	102	1,64,585	...
14th ditto	Morva	60	2,410	35	65	2,741	40	83,771	54	93,039	60	9,428	...
14th ditto	Jodhpore	124	4,449	34	124	5,100	41	1,53,448	56	1,54,989	53	...	8,458
	TOTAL	791	57,404	73	893	68,165	77	14,79,125	80	19,24,193	94	4,45,068	...

(a) Includes the Dildarnagar Ghazipur State Railway.

(b) Included with East Indian Railway.

(c) Included with Indian Midland Railway.

(d) Includes the Katni-Umari Branch.

(e) Includes the Sanctoria Coal Section of the Bengal-Nagpur Railway.

(f) Includes the Bellary-Kistna State Railway.

(g) Includes the Sindia and Bhopal-Itarsi State Railways.

(h) Includes the Amritsar-Patankot and Rajpura-Bhatinda State Railways.

(i) Includes the Toungoo-Mandalay extension.

(j) Includes the Dhoond-Manmad, Khamgaon, Amritoti, and Bhopal-Itarsi State Railways.

(k) Includes the Dhoond-Manmad, Khamgaon, and Amritoti State Railways.

(l) Includes the Patri Branch.

(m) Return not received.

(n) Total receipts from 1st April to 1st September 1888.

(o) Total receipts from 1st April to 31st August 1889.

M. C. BRACKENBURY, Major, R.E.,

Under-Secretary

Simla, 3rd October, 1889.

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SUPPLEMENT TO  
**The Gazette of India.**

No. 41.} CALCUTTA, SATURDAY, OCTOBER 12, 1889.

**OFFICIAL PAPERS.**

A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor General will in future be published in PART VI of the GAZETTE.

Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on a payment of five Rupees per annum if delivered in Calcutta, or eight Rupees if sent by Post. The SUPPLEMENT and PART VI of the GAZETTE can also be subscribed for separately on a payment of Rupees six per annum if delivered in Calcutta or Rupees nine if sent by Post.

No Official Orders or Notifications, the Publication of which in the GAZETTE OF INDIA is required by Law, or which it has been customary to publish in the CALCUTTA GAZETTE, will be included in the SUPPLEMENT. For such Orders and Notifications the body of the GAZETTE must be looked to.

GOVERNMENT OF INDIA.  
PUBLIC WORKS DEPARTMENT.  
RAILWAY TRAFFIC.

**RETURNS OF ACCIDENTS ON INDIAN RAILWAYS FOR THE FIRST  
QUARTER OF 1889.**

No. 496 R. T., dated Simla, the 17th September, 1889.

RESOLUTION—By the Government of India, Public Works Department.

Read again—

Public Works Department Resolution No. 840-R. T., dated 9th September 1884.  
" " " " No. 810-R. T., dated 8th September 1885.  
" " " " No. 902-R. T., dated 11th September 1886.  
" " " " No. 1106-R. T., dated 19th September 1887.  
" " " " No. 0102-R. T., dated 28th December 1888.  
" " " " No. 298-R. T., dated 3rd July 1889.

Read also—

Director General of Railways' No. 157 (Statistical), dated the 23rd August 1889, forwarding the Abstract Returns of Accidents to Trains, &c., on the open lines of Railway in India for the quarter ended 31st March 1889.

OBSERVATIONS.—As compared with the average of the five\* corresponding previous quarters, the number of accidents to trains, rolling stock, permanent-way, &c., shows an increase of 42, or 6.59 per cent., with an increase of 1,977 miles, or 15.43 per cent. in the mean mileage open, and of 1,441,969 miles, or 12.24 per cent. in the train-mileage. The following are the Railways on which the more important fluctuations occurred:—

RAILWAY.	Number of accidents.	ACCIDENTS.				* TRAIN-MILEAGE.	
		Increase.	Decrease.	Percentage of increase.	Percentage of decrease.	Percentage of increase.	Percentage of decrease.
Rajputana-Malwa . . . . .	80	9	...	12.70	...	16.34	...
Bengal-Nagpur . . . . .	24	13	...	118.18	...	30.20	...
Southern Mahratta . . . . .	50	21	...	72.41	...	78.53	...
Indian Midland . . . . .	26	19	...	271.43	...	462.17	...
North-Western . . . . .	75	...	26	...	25.74	15.46	...
Great Indian Peninsula . . . . .	61	15	...	32.61	...	5.71	...
Dibru-Sadiya . . . . .	11	...	19	...	63.33	12.08	...
The Nizam's . . . . .	18	9	...	100.00	...	47.62	...

\* Except where statistics for five quarters are not available for any line.

2. The increase of 9 accidents on the Rajputana-Malwa State Railway is chiefly attributable to 14 cases of "Failure of axles" having been reported against 4, and 16 cases of "Failure of couplings" against 10. There was a decrease of 3 accidents under "Trains or engines travelling in the wrong direction through points"; and of 3 under "Broken rails."

3. Of the increase of 13 accidents on the Bengal-Nagpur Railway, 5 were under "Goods trains or parts of Goods trains, engines, &c., leaving the rails" and 5 under "Trains running over cattle on the line."

4. On the Southern Mahratta Railway the number of accidents rose from 29 to 50 or 72·41 per cent., with an increase of 380·25 miles, or 80·05 per cent., in the mean mileage worked, and of 161,616 miles, or 78·53 per cent., in the train-mileage run. The increase chiefly occurred under "Trains running over cattle on the line" and "Trains running over obstructions on the line," the number recorded under the former being 26 against 16 and under the latter 6 against 1.

5. On the Indian Midland Railway, the number of accidents rose from 7 to 26 or 271·43 per cent.; the mean mileage worked increased by 352·75 miles, or 339·18 per cent.; and the train-mileage by 205,925 miles, or 462·17 per cent. The number chiefly increased under "Goods trains or part of Goods trains, engines, &c., leaving the rails," *vis.*, from 1 to 11.

6. Of the decrease of 26 accidents on the North-Western Railway, 6 appear under "Goods trains or parts of Goods trains, engines, &c., leaving the rails"; 7 under "Failure of couplings"; and 5 under "Fire in trains."

7. On the Great Indian Peninsula Railway, there was an increase of 16 accidents under "Fire in trains," and a decrease of 7 under "Goods trains, or parts of Goods trains, engines, &c., leaving the rails."

8. The decrease on the Dibru-Sadiya Railway mainly occurred under "Passenger trains or parts of Passenger trains leaving the rails," from 7 to 2; under "Trains running over cattle on the line," from 7 to 1; and under "Failure of couplings," from 6 to *nil*.

9. On His Highness the Nizam's Guaranteed State Railway, the only noticeable difference was an increase from 3 to 9 under "Trains running over cattle on the line."

10. The casualties resulting from accidents to trains, &c., were among passengers and others: 1 killed and 9 injured, against 1 killed and 18 injured; and among servants 2 killed and 8 injured, against 2 killed and 9 injured.

11. Of the casualties to passengers, 1 was killed and 4 were injured on the North-Western Railway in consequence of an up mixed train colliding with a ballast train at Kallúr Kot, due to the driver of the mixed train running into the station against signals and on to the line where the ballast train was standing. Three persons were slightly injured on the Great Indian Peninsula Railway by a down passenger train running into Nándgaon siding and colliding with a ballast train.

12. On the East Indian Railway when a pilot engine was returning to mile 130 for the balance of an up train, which had been left behind owing to the inability of the train engine to drag the load, it collided with the wagons which had not been protected by danger signals. Three railway servants were injured.

13. The following table exhibits the number of accidents under the different classes, due to accidents to trains, rolling stock, permanent-way, &c., and the number of persons killed and injured thereby, *vide* Tables Nos. 3 and 4:—

Serial No.	CAUSES OF ACCIDENTS.	Average of corresponding quarters of five previous years.*	FIRST QUARTER, 1889.				TOTAL ALL CLASSES.		
			No.	No. of passengers and others.		No. of Servants.		Killed.	Injured.
				Killed.	Injured.	Killed.	Injured.		
1	Collisions between passenger trains, or parts of passenger trains	1	1	...	...	...	...	...	
2	Collisions between passenger trains and goods, or mineral trains, engines and vehicles standing foul of the line	10	9	1	7	2	1	9	
3	Collisions between goods trains, or parts of goods trains	19	22	...	...	3	...	3	
4	Collisions between light engines	...	1	...	...	...	...	...	

\* Except where statistics for five quarters are not available for any line.

Serial No.	CAUSES OF ACCIDENTS.	Average of corresponding quarters of five previous years.*	FIRST QUARTER, 1889.				TOTAL ALL CLASSES.		
			No.	No. of passengers and others.		No. of Servants.		Killed.	Injured.
				Killed.	Injured.	Killed.	Injured.		
5	Passenger trains, or parts of passenger trains leaving the rails . . . . .	26	13	...	...	...	...	...	...
6	Goods trains or parts of goods trains, engines &c, leaving the rails . . . . .	70	77	...	...	...	1	...	1
7	Trains or engines travelling in the wrong direction through points . . . . .	14	12	...	...	...	...	...	...
8	Trains running into stations or sidings at too high a speed . . . . .	3	3	...	...	...	...	...	...
9	Trains running over cattle on the line . . . . .	228	229	...	...	...	...	...	...
10	" " over obstructions on the line . . . . .	26	43	...	1	...	...	...	1
11	" " through gates at level crossings . . . . .	11	14	...	...	...	...	...	...
12	The bursting of boilers of engines . . . . .	18	20	...	...	...	...	...	...
12(a)	" " of tubes, &c., of engines . . . . .								
13	The failure of machinery, springs, &c., of engines . . . . .	49	45	...	...	...	...	...	...
14	" " of tyres . . . . .	1	1	...	...	...	...	...	...
15	" " wheels . . . . .	3	3	...	...	...	...	...	...
16	" " axles . . . . .	6	21	...	...	...	...	...	...
17	" " brake apparatus . . . . .	...	2	...	...	...	...	...	...
18	" " couplings . . . . .	37	29	...	...	...	...	...	...
19	" " tunnels, bridges, viaducts, culverts, &c. . . . .	...	...	...	...	...	...	...	...
20	Broken rails . . . . .	5	9	...	...	...	...	...	...
21	The flooding of portions of permanent-way . . . . .	1	2	...	...	...	...	...	...
22	Slips in cuttings or embankments . . . . .	1	2	...	...	...	...	...	...
23	Fire in trains . . . . .	57	64	...	...	...	...	...	...
24	Fire at stations, or involving injury to bridges or viaducts . . . . .	8	15	...	...	1	...	1	...
25	Other accidents . . . . .	46	42	...	1	1	2	1	3
1889		...	679	1	9	2	8	3	17
Total average of corresponding quarters of five previous years*.		...	637	1	18	2	9	3	27

\* Except where statistics for five quarters are not available for any line.

14. The principal variations occurred under "Passenger trains, or parts of passenger trains, leaving the rails," 13 against 26; "Trains running over obstructions on the line," 43 against 26; "Failure of axles," 21 against 6; and "Failure of couplings," 29 against 37.

15. The decrease under "Passenger trains, or parts of passenger trains leaving the rails" was chiefly due to the number of accidents recorded on the Jorhat and Dibru-Sadiya Railways, being *nil* against 4 and 2 against 7, respectively.

16. Of the 77 cases of "Goods trains or parts of Goods trains, engines, &c., leaving the rails," 11 occurred on the Indian Midland Railway and the same number on the Madras Railway; 8 on the Jorhat State Railway and a similar number on the Dibru-Sadiya Railway; 7 on the Eastern Bengal State Railway; 6 on the East Indian; and 6 on the Bengal-Nagpur Railway.

17. Of the 229 cases of "Trains running over cattle on the line," 44 occurred on the Eastern Bengal State Railway; 27 on the Rajputana-Malwa State Railway; 26 on the Southern Mahratta Railway; 23 on the North-Western Railway; and 16, 15 and 14, respectively, on the South Indian, Madras, and East Indian Railways.

18. The increase under "Trains running over obstructions on the line" occurred mainly on the Rajputana-Malwa, Southern Mahratta, Oudh and Rohilkhand, Eastern Bengal, and South Indian Railways.

19. Of the 45 cases of "Failure of machinery, springs, &c., of engines," 12 occurred on the North-Western Railway; 6 on the South Indian Railway; 5 on the Rajputana-Malwa; and 5 on the Southern Mahratta Railway.

20. On the Rajputana-Malwa State Railway there were 14 cases of "Failure of axles" out of a total of 21.

21. The decrease of 8 accidents under "Failure of couplings" was mainly due to decreases on the North-Western, Eastern Bengal, and Dibru-Sadiya Railways.

22. The number of cases of "Fire in trains" was the largest on the Great Indian Peninsula Railway, *viz.*, 32 out of a total of 64.

23. Of the 42 accidents classified as "Other accidents," 23 have been returned by the Bombay, Baroda and Central India Railway.

24. The casualties to passengers from causes other than accidents to trains, &c., *vide* Table No. 2, were —

CAUSES OF ACCIDENT.	FIRST QUARTER, 1889.		AVERAGE OF CORRESPONDING QUARTERS OF FIVE PREVIOUS YEARS.*	
	Killed.	Injured.	Killed.	Injured.
From falling between carriages and platforms	...	4	1	2
Falling on to the platform, ballast, &c., when getting into or out of trains	2	2	2	3
Whilst crossing the line at stations	2	...	1	...
Falling out of carriages during the travelling of trains	3	19	2	14
Other accidents	1	10	3	5
TOTAL	8	35	9	24

\* Except where statistics for five quarters are not available for any line.

25. The accidents to servants in the employ of Railways or of Contractors, whilst performing duties connected directly with the transit of passengers and goods, from causes other than accidents to trains, &c., were as follows, *vide* Table No. 2 :—

CAUSES OF ACCIDENTS.	FIRST QUARTER, 1889.		AVERAGE OF CORRESPONDING QUARTERS OF FIVE PREVIOUS YEARS.*	
	Killed.	Injured.	Killed.	Injured.
During shunting operations	8	11	7	11
Falling of engines, vans, wagons, &c.	...	11	2	11
Coming in contact with over-bridges, &c., during the travelling of trains	...	1	...	2
Coming in contact, while shunting, with vehicles, &c., standing in adjoining lines	2	...	1	1
Getting on or off trains, engines, &c.	1	7	4	10
Whilst loading, unloading or sheeting	...	22	2	17
Whilst breaking, spragging, or choking wheels	...	3	...	2
Whilst working at cranes or capstans	...	5	...	3
Whilst working on the permanent-way or in sidings	...	6	2	6
Whilst walking along the line on the way home, or to work	1	...	1	1
Whilst walking, crossing, or standing on the line	6	8	6	5
Whilst passing between vehicles	1	1	1	2
Whilst attending to the machinery of engines, cleaning them, &c.	...	5	1	5
Whilst attending to gates at level crossings	1	1	...	2
Falling or being caught between vehicles and platforms	...	3	1	1
Falling of ladders, scaffolds, platforms, &c.	1	6	1	3
By falling of lamps, wagon doors, timber, weights, &c.	...	16	1	6
Whilst coupling or uncoupling wagons	2	9	1	7
Miscellaneous	5	35	4	26
TOTAL	25	150	35	121

\* Except where statistics for five quarters are not available for any line.

26. Of other persons killed and injured by running trains, &c., 3 were killed and 5 injured, whilst passing over the line at level crossings; 34 were killed and 15 injured, whilst trespassing on the line; 11 committed suicide, and 7 were killed and 1 was injured from miscellaneous causes.

27. The following table exhibits the total number of persons killed and injured from all causes on the whole Indian Railway system, as compared

with the average of the corresponding quarters of five previous years, *vide* Table No. I :—

CAUSES OF ACCIDENTS.	FIRST QUARTER, 1889.		AVERAGE OF CORRESPONDING QUARTERS OF FIVE PREVIOUS YEARS.*	
	Killed.	Injured.	Killed.	Injured.
<i>Passengers.</i>				
From causes beyond their own control . . . .	1	11	1	20
From misconduct or want of caution . . . .	8	32	8	23
<i>Servants.</i>				
From causes beyond their own control . . . .	9	30	5	13
From misconduct or want of caution . . . .	21	128	33	119
<i>Others.</i>				
Whilst passing at level crossings . . . .	3	5	1	1
Trespassers including suicides . . . .	45	15	36	10
Other persons . . . .	7	1	2	2
TOTAL . . . .	94	222	86	185
TOTAL OPEN MILEAGE . . . .	14,792		12,815	
TOTAL TRAIN-MILEAGE . . . .	13,224,461		11,782,492	

\* Except where statistics for five quarters are not available for any line.

28. In addition to the above, 4 persons are reported to have been killed and 40 injured in yards, workshops, &c., and 160 persons to have died in carriages and at stations from causes unconnected with the working of trains.

RESOLUTION.—The large number of failures of axles on the Rajputana-Malwa Railway again attracts notice, 14 cases having occurred during the quarter under review. Failures of couplings on the Rajputana-Malwa Railway take a large proportion, the failures being 16 in a total for all Railways of 29.

The Government of India also observes that, in the cases of "Fire in trains," the large number of 32, or one-half, is recorded as having occurred on the Great Indian Peninsula Railway, out of a total of 64 for all Railways.

Cases of trains running over obstructions on the line have increased considerably, the number reported for the quarter being 43 against an average of 26 in the corresponding quarter of five previous years. The increases are mainly on the Rajputana-Malwa, Southern Mahratta, Oudh and Rohilkhand, Eastern Bengal and South Indian Railways.

The decrease in the total number of accidents on the North-Western and on the Dibru-Sadiya Railways is satisfactory.

ORDER.—Ordered that this Resolution be communicated, for information,

The Governments of Madras, Bombay, Bengal, the North-Western Provinces and Oudh, and the Punjab.

The Chief Commissioners of the Central Provinces, Burma, and Assam.

The Resident at Hyderabad.

The Agents to the Governor General for Central India, Rajputana and Baluchistan.

The Director General of Railways.

The Consulting Engineers to the Government of India for Railways, Calcutta, Lucknow, and Central Division.

to the Local Govern-

ments, Administra-

tions and Officers

noted in the margin.

Ordered also that copies be forwarded for the information of Her Majesty's Government.

Ordered further that this Resolution, with the Abstract Returns, be published in the Supplement to the *Gazette of India*.

M. C. BRACKENBURY, Major, R.E.,

Under-Secretary.

Documents accompanying.

Abstract Returns of Accidents for the first quarter of 1889.

TABLE No. 1.

## GENERAL TOTAL.

NUMBER OF PERSONS REPORTED DURING THE FIRST QUARTER OF 1889 AS KILLED OR INJURED ON THE SEVERAL RAILWAYS OPEN FOR TRAFFIC IN INDIA, DISTINGUISHING BETWEEN PASSENGERS, RAILWAY SERVANTS, and OTHER PERSONS; and distinguishing also in the case of the two former classes between ACCIDENTS HAPPENING FROM CAUSES BEYOND THEIR OWN CONTROL, and ACCIDENTS HAPPENING OTHERWISE.

Mean mileage open.	RAILWAYS.	PASSENGERS.				RAILWAY SERVANTS, OR SERVANTS OF CONTRACTORS.				OTHER PERSONS.				TOTAL ALL CLASSES.			
		From Causes beyond their own Control.		From their own Misconduct or want of Caution.		Total.		From Causes beyond their own Control.		From their own Misconduct or want of Caution.		Total.					
		Killed. Injured.		Killed. Injured.		Killed. Injured.		Killed. Injured.		Killed. Injured.		Killed. Injured.					
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.				
STATE IMPERIAL.																	
(a) 1,681½	{ East Indian ... }	...	5	3	7	3	12	3	6	5	24	8	30	14	2	25	44
(3) 1,850½	...	...	...	4	3	4	3	4	25	1	30	5	55	15	3	24	60
(c) { 1,614½ 1,601½ }	{ Rajputana-Malwa ... }	...	1	1	2	1	3	...	...	2	7	2	9	2	...	5	12
(d) { 196 296½ }	{ Bengal-Nagpur .. }	...	...	1	8	1	8	...	...	2	6	2	6	3	2	6	16
(e) { 475 855½ }	{ Southern Mahratta ... }	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	2
(f) { 129 174 }	{ Ditto, Mysore Section ... }	...	1	...	2	...	3	1	2	1	2	1	2	1	1	1	1
(g) { 104 456½ }	{ Indian Midland ... }	...	...	...	...	...	...	1	...	...	...	1	...	...	...	1	...
(h) { 2,008 2,386 }	{ North Western ... }	1	2	3	5	4	7	1	1	6	12	7	13	5	1	16	21
(i) { 628½ 692½ }	{ Oudh and Rohilkhand . }	...	1	...	1	...	10	...	1	4	6	4	7	7	4	12	21
(j) { 45 45 }	{ Wardha Coal ... }	...	...	...	2	...	2	...	...	1	3	1	3	3	1	6	8
(k) { 45 45 }	{ Average for 5 correspond- ing previous quarters. 1889 }	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(l) { 701 703 }	{ Eastern Bengal . . . }	...	3	...	1	...	3	...	1	2	7	2	8	4	1	6	13
(m) { 703 703 }	{ Average for 5 correspond- ing previous quarters. 1889 }	...	...	...	2	...	...	1	...	4	12	5	12	5	1	10	15
STATE PROVINCIAL.																	



TABLE NO. 1—continued.  
GENERAL TOTAL.  
Number of Persons reported during the First Quarter of 1889 as KILLED or INJURED on the several Railways open for Traffic in INDIA, &c.—continued.

Mean mileage open.	RAILWAYS.	PASSENGERS.				RAILWAY SERVANTS OR SERVANTS OF CONTRACTORS.				OTHER PERSONS.				TOTAL ALL CLASSES.									
		From Causes beyond their own Control.		From their own Misconduct or want of Caution.		Total.		From Causes beyond their own Control.		From their own Misconduct or want of Caution.		Total.			Whilst passing over Railways at Level-Crossings.		Trespassers and Suicides.		Miscellaneous not included in preceding columns.		Total.		
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	
{ 91 (a) { 91	{ Rohilkhand-Kumaon Average for 4 corresponding previous quarters. 1889	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
{ 8 8	{ Thakur-Dayinzik Average for 2 corresponding previous quarters. 1889	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	FOREIGN.																						
	Pondicherry	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	West of India Portuguese	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	NATIVE STATES.																						
1691 (b) 334	{ H. H. the Nizam's Guaranteed Average for 5 corresponding previous quarters. 1889	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
59 581	{ H. H. the Gaekwar's Average for 5 corresponding previous quarters. 1889	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
193 2421	{ Bhavnagar-Gondal Junagarh- Porbandar. Average for 5 corresponding previous quarters. 1889	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
60 68	{ Morvi Average for 2 corresponding previous quarters. 1889	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
651 124	{ Jodhpore Average for 5 corresponding previous quarters. 1889	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
12,815 14,793	{ TOTAL Average for 5 corresponding previous quarters (c). 1889	1	20	8	30	9	40	5	13	33	119	38	133	1	1	36	10	3	2	39	18	88	185
		1	11	8	32	9	43	9	30	21	123	30	153	3	5	45	15	7	1	55	21	94	222

(a) Includes the Barilly-Fulbhiti State Railway.

(b) Includes the Baroda Extension.

(c) Except where statistics for five quarters are not available for any line.

TABLE No. 2.



## No. 2.

Traffic in INDIA, distinguishing between PASSENGERS, RAILWAY SERVANTS, and OTHER PERSONS, and classifying, as far as Accidents occasioning the Death or Injury.

## VANTS.

## FROM CAUSES OTHER THAN ACCIDENTS TO TRAINS, &amp;c.

FROM CAUSES OTHER THAN ACCIDENTS TO TRAINS, &c.																								OTHERS.										Serial Number.	
																																		TOTAL ALL CLASSES.	
																								</											

South Indian Railway.  
not furnished.

(A) Includes the Bengal Central Railway.  
(B) Includes the Tongo Mandalay Extension.  
(C) Includes the Villupuram-Jharinavaram State Railway, Nellore Branch, and Pondicherry Railway.  
(D) Includes the Pondicherry Extension.

(E) Includes the Patri Branch.  
(F) Includes the Bareilly-Pilibhit State Railway.  
(G) Includes the Bezwada Extension.

not available for any line.

TABLE No. 3.

ACCIDENTS TO TRAINS, ROLLING-STOCK, PERMANENT-WAY, &c., reported during the First Quarter of 1889 as having occurred on the several Railways open for Traffic in INDIA, distinguishing the different Classes of Accidents, and the Number of Passengers and Others, and of Railway Servants Killed or Injured in each Class of Accident.

SEE ALSO TABLE No. 4.  
STATE INTERNAL.

	EAST INDIA (a).						RAJPUTANA-MALWA (b).						BENGAL-NAGPUR (c).						SOUTHERN MADRAS (d).					
	Number of Passengers and others.			Number of Servants.			Number of Passengers and others.			Number of Servants.			Number of Passengers and others.			Number of Servants.			Number of Passengers and others.			Number of Servants.		
	No.	Killed.	Injured.	No.	Killed.	Injured.	No.	Killed.	Injured.	No.	Killed.	Injured.	No.	Killed.	Injured.	No.	Killed.	Injured.	No.	Killed.	Injured.	No.	Killed.	Injured.
1. Collisions between passenger trains, or parts of passenger trains ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2. Collisions between passenger trains and goods or mineral trains, engines and vehicles standing foul of the line ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3. Collisions between goods trains, or parts of goods trains ...	6	...	3	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	
4. Collisions between light engines ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
5. Passenger trains, or parts of passenger trains, leaving the rails ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
6. Goods trains, or parts of goods trains, engines, &c., leaving the rails ...	6	...	...	...	...	...	3	...	...	...	...	...	6	...	...	...	...	...	...	...	...	...	...	
7. Trains or engines travelling in the wrong direction through points ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
8. Trains running into stations or sidings at too high a speed ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
9. Trains running over cattle on the line ...	14	...	1	...	...	...	27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
10. Ditto over obstructions on the line ...	4	1	...	...	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
11. Ditto through gates at level-crossings ...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
12. The bursting of boilers of engines ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
12(a). Ditto of tubes, &c., of engines ...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
13. The failure of machinery, springs, &c., of engines ...	...	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
14. Ditto of tyres ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
15. Ditto of wheels ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
16. Ditto of axles ...	...	...	...	...	...	...	14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
17. Ditto of brake apparatus ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
18. Ditto of couplings ...	1	...	...	...	...	...	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
19. Ditto of tunnels, bridges, viaducts, culverts, &c. ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
20. Broken rails ...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
21. The flooding of portions of permanent-way ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
22. Slips in cuttings or embankments ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
23. Fire in trains ...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
24. Fire at stations, or involving injury to bridges or viaducts ...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
25. Other accidents ...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
TOTAL ALL CLASSES	31	1	3	4	...	...	80	...	...	...	...	...	24	...	...	50	...	...	9	...	...	...	...	
Number of passenger miles ...	...	268,100,045	...	...	...	...	132,859,951	...	...	...	...	...	7,255,123	...	...	...	...	...	28,735,828	...	...	...	...	
" of servants employed ...	...	26,971	...	...	...	...	12,158	...	...	...	...	...	2,465	...	...	...	...	5,935	...	...	...	...	...	
Train-mileage of all descriptions	...	2,180,442	...	...	...	...	1,643,863	...	...	...	...	...	175,063	...	...	...	...	367,411	...	...	...	...	...	

(a) Not a passenger, but a cart man was injured on the Sindia State Railway.  
(b) Includes H. H. the Gaekwar's Virmangam Mehsana-Vadnagar State Railway.  
(c) Includes the Kaimi-Ennaris Branch.  
(d) Includes the Bellary-Kistna State Railway.

TABLE No. 3.—ACCIDENTS TO TRAINS, ROLLING-STOCK, PERMANENT-WAY, &amp;c., reported during the First Quarter of 1889, &amp;c.—continued.

		STATE IMPERIAL—continued.										STATE PROVINCIAL.																			
		INDIAN-MIDLAND (a).					NORTH WESTERN (b).					ODISHA AND ROLLEHARD (c).					WARDHA COAL.					EASTERN BENGAL (d).									
No.		Number of Passengers and others.		Number of Servants.		Total all Classes.		Number of Passengers and others.		Number of Servants.		Total all Classes.		Number of Passengers and others.		Number of Servants.		Total all Classes.		Number of Passengers and others.		Number of Servants.		Total all Classes.		Number of Passengers and others.		Number of Servants.		Total all Classes.	
		No.	Killed.	Injured.	No.	Killed.	Injured.	No.	Killed.	Injured.	No.	Killed.	Injured.	No.	Killed.	Injured.	No.	Killed.	Injured.	No.	Killed.	Injured.	No.	Killed.	Injured.	No.	Killed.	Injured.	No.	Killed.	Injured.
1.	Collisions between passenger trains, or parts of passenger trains	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2.	Collisions between passenger trains and goods or mineral trains, engines, and vehicles standing foul of the line	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3.	Collisions between goods trains, or parts of goods trains	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4.	Collisions between light engines	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5.	Passenger trains, or parts of passenger trains, leaving the rails	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6.	Goods trains, or parts of goods trains, engines, &c., leaving the rails	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7.	Trains of engines travelling in the wrong direction through points	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8.	Trains running into stations or sidings at too high a speed	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9.	Trains running over cattle on the line	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10.	Ditto over obstructions on the line	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11.	Ditto through gates at level-crossings	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12.	The bursting of boilers of engines	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13.	Ditto of tubes, &c., of engines	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14.	The failure of machinery, springs, &c., of engines	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15.	Ditto of tyres	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16.	Ditto of wheels	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17.	Ditto of axles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18.	Ditto of brake apparatus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19.	Ditto of couplings	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20.	Ditto of tunnels, bridges, viaducts, culverts, &c.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21.	Broken rails	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22.	The flooding of portions of permanent-way	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23.	Slips in cuttings or embankments	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24.	Fire in trains	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25.	Fire at stations, or involving injury to bridges or viaducts	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26.	Other accidents	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL ALL CLASSES		26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Number of passenger miles		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" of servants employed		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Train mileage of all descriptions		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
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		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		...	...	...	...																										

TABLE No. 3.—ACCIDENTS TO TRAINS, ROLLING-STOCK, PERMANENT-WAY, &c., reported during the First Quarter of 1889, &c.—continued.

[illegible]

TABLE No. 3.—ACCIDENTS TO TRAINS, ROLLING-STOCK, PERMANENT-WAY, &amp;c., reported during the First Quarter of 1889, &amp;c.—continued.

SEE ALSO TABLE No. 4.															
UNCLASSIFIED COMPANIES.															
BOMBAY (a).				MADRAS.				SOUTH INDIAN (b).				GREAT INDIAN PENINSULA (c).			
No.	Number of Passengers and others.		Total all Classes.	No.	Number of Passengers and others.		Total all Classes.	No.	Number of Passengers and others.		Total all Classes.	No.	Number of Passengers and others.		Total all Classes.
	Killed.	Injured.			Killed.	Injured.			Killed.	Injured.			Killed.	Injured.	
1. Collisions between passenger trains, or parts of passenger trains ...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
2. Collisions between passenger trains and goods or mineral trains, engines, and vehicles standing foul of the line ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3. Collisions between goods trains, or parts of goods trains ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4. Collisions between light engines ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5. Passenger trains, or parts of passenger trains leaving the rails ...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...
6. Goods trains, or parts of goods trains, engines, &c., leaving the rails ...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
7. Trains or engines travelling in the wrong direction through points ...	4	...	...	11	...	...	...	...	...	...	...	...	...	...	...
8. Trains running into stations or sidings at too high a speed ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9. Trains running over cattle on the line ...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10. Ditto over obstructions on the line ...	1	...	...	15	...	...	...	...	...	...	...	...	...	...	...
11. Ditto through gates at level-crossings ...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
12. The bursting of boilers of engines ...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
13. The failure of machinery, springs, &c., of engines ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14. Ditto of wheels ...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...
15. Ditto of axles ...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...
16. Ditto of brake apparatus ...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17. Ditto of couplings ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18. Ditto of funnels, bridges, viaducts, culverts, &c. ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19. Broken rails ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20. The flooding of portions of permanent-way ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21. Ships in cuttings or embankments ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22. Fire in trains ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23. Fire at stations, or involving injury to bridges or viaducts ...	...	...	...	10	...	...	...	...	...	...	...	...	...	...	...
24. Other accidents ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25. ...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL ALL CLASSES	12	...	...	47	...	...	...	...	...	...	...	...	...	...	...
Number of Passenger miles ...	38,128,024			78,793,800			65,845,149			126,337,381					
" of Servants employed ...	4,420			6,468			10,114			25,418					
Train mileage of all descriptions	364,728			570,018			519,507			2,579,414					
(a) Includes the Poonjee-Mandaly Extension.				(b) Includes the Villupuram-Dharmavaram State Railway, Nellore Branch, and Pondicherry Railway.				(c) Includes the Phond-Mannad, Amraoti and Khandagao State Railways.				(d) Includes the Patli Branch.			

TABLE No. 3.—ACCIDENTS TO TRAINS, ROLLING-STOCK, PERMANENT-WAY, &amp;c., reported during the First Quarter of 1889, &amp;c.—continued.

	DAKSHIN-GHATWAY.				DECCAN.				DECCAN AND NORTH-WESTERN.				BOMBAY AND KANARVAH.			
	Number of Passengers and others.		Number of Servants.		Number of Passengers and others.		Number of Servants.		Number of Passengers and others.		Number of Servants.		Number of Passengers and others.		Number of Servants.	
	No.	Killed.	Injured.	Total all Classes.	No.	Killed.	Injured.	Total all Classes.	No.	Killed.	Injured.	Total all Classes.	No.	Killed.	Injured.	Total all Classes.
1. Collisions between passenger trains, or parts of passenger trains ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2. Collisions between passenger trains and goods or mineral trains, engines, and vehicles standing foul of the line ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3. Collisions between goods trains, or parts of goods trains ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4. Collisions between light engines ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5. Passenger trains, or parts of passenger trains leaving the rails ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6. Goods trains, or parts of goods trains, engines, &c., leaving the rails ...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7. Trains or engines travelling in the wrong direction through points ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8. Trains running into stations or sidings at too high a speed ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9. Trains running over cattle on the line ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10. Ditto over obstructions on the line ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11. Ditto through gates at level-crossings ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12. The bursting of boilers of engines ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13. Ditto of tubes, &c., of engines ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14. The failure of machinery, springs, &c., of engines ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15. Ditto of tyres ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16. Ditto of wheels ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17. Ditto of axles ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18. Ditto of brake apparatus ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19. Ditto of couplings, bridges, viaducts, culverts, &c. ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20. Broken rails ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21. The flooding of portions of permanent-way ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22. Slips in cuttings or embankments ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23. Fire in trains ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24. Fire at stations, or involving injury to bridges or viaducts ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25. Other accidents ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>TOTAL ALL CLASSES</b>	<b>2</b>	...	...	...	<b>11</b>	...	...	...	<b>10</b>	...	...	...	<b>6</b>	...	...	...
Number of passenger miles ...	223,987	...	...	...	355,466	...	...	...	17,652,292	...	...	...	1,772,403	...	...	...
.. of servants employed ...	626	...	...	...	54	...	...	...	3,360	...	...	...	741	...	...	...
Train mileage of all descriptions	36,112	...	...	...	3,249	...	...	...	194,825	...	...	...	31,376	...	...	...

(e) Includes the Bareilly-Pilibhit State Railway.

TABLE No. 3.—ACCIDENTS TO TRAINS, ROLLING-STOCK, PERMANENT-WAY, &amp;c., reported during the First Quarter of 1889—continued.

	SEE ALSO TABLE NO. 4.										NATIVE RAILWAYS.									
	AMERICAN COMPANIES—continued.					FOREIGN.					HIS HIGHNESS THE Nizam's (GUARANTEED).					H. H. THE GAIKWAD'S.				
	TATTOON-DUTTIAH'S.					PORECHERRY.					WEST OF INDIA PORTUGUESE.					Number of Passengers and others.				
	No.	Number of Passengers and others.	Number of Servants.	Total all Classes.	No.	Number of Passengers and others.	Number of Servants.	Total all Classes.	No.	Number of Passengers and others.	Number of Servants.	Total all Classes.	No.	Number of Passengers and others.	Number of Servants.	Total all Classes.	No.	Number of Passengers and others.	Number of Servants.	Total all Classes.
1. Collisions between passenger trains, or parts of passenger trains ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2. Collisions between passenger trains and goods or mineral trains, engines, and vehicles standing foul of the line ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3. Collisions between goods trains, or parts of goods trains ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4. Collisions between light engines ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5. Passenger trains, or parts of passenger trains, leaving the rails ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6. Goods trains, or parts of goods trains, engines, &c., leaving the rails ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7. Trains or engines travelling in the wrong direction through points ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8. Trains running into stations or sidings at too high a speed ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9. Trains running over cattle on the line ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10. Ditto over obstructions on the line ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11. Ditto through gates at level-crossings ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12. The bursting of boilers of engines ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12(a). The bursting of tubes, &c., of engines ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13. The failure of machinery, springs, &c., of engines ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14. Ditto of tyres ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15. Ditto of wheels ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16. Ditto of axles ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17. Ditto of brake apparatus ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18. Ditto of couplings ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19. Ditto of tunnels, bridges, viaducts, culverts, &c. ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20. Broken rails ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21. The flooding of portions of permanent-way ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22. Slips in cuttings or embankments ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23. Fire in trains ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24. Fire at stations, or involving injury to bridges or viaducts ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25. Other accidents ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL ALL CLASSES	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Number of passenger miles ...	72,144	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13,556,400	...	...	1,358,515	...
" of servants employed ...	63	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,606	...	...	231	...
Train mileage of all descriptions ...	3,713	...	...	...	...	...	...	...	...	...	...	...	...	...	...	131,740	...	...	16,853	...

(a) Includes the Dera Gha Extension.



TABLE No. 4.

TABLE

ACCIDENTS TO TRAINS, ROLLING-STOCK, PERMANENT-WAY, &c., on the several RAILWAYS open for Traffic in INDIA during the Number of RAILWAY SERVANTS

Serial Number.	RAILWAYS.	1. Collisions between passenger trains, or parts of passenger trains.	2. Collisions between passenger trains and goods or mixed trains, engines, and vehicles standing foul of the line.	3. Collisions between goods trains, or parts of goods trains.	4. Collisions between light engines.	5. Passenger trains, or parts of passenger trains, leaving the rails.	6. Goods trains, or parts of goods trains, engines, &c., leaving the rails.	7. Trains or engines travelling in the wrong direction through points.	8. Trains running into stations or sidings at too high a speed.	9. Trains running over cattle on the line.	10. Trains running over obstructions on the line.	11. Trains running through gates at level-crossings.	12. The bursting of boilers of engines.	13(a.) The bursting of tubes, &c., of engines.	13. The failure of machinery, springs, &c., of engines.	14. The failure of tyres.	15. The failure of wheels.	16. The failure of axles.	17. The failure of brake apparatus.	18. The failure of couplings.	19. The failure of tunnels, bridges, viaducts, culverts, &c.	20. Broken rails.	21. The flooding of portions of permanent-way.
<b>STATE IMPERIAL.</b>																							
1	East Indian (a) ...	...	...	6	...	...	6	...	...	14	4	...	...	...	...	...	...	...	...	1	...	...	...
2	Rajputana Malwa (b) ...	...	...	1	...	...	3	...	...	27	6	2	...	1	6	...	...	14	...	16	...	1	...
3	Bengal-Nagpur (c) ...	...	...	1	...	...	6	3	2	8	2	...	...	...	...	...	...	...	...	...	...	...	...
4	Southern Mahratta (d) ...	...	...	...	...	...	1	...	...	26	6	...	...	1	5	...	...	...	...	2	...	...	...
5	Ditto Mysore Section	...	...	...	...	...	1	...	...	7	...	...	...	...	...	...	...	...	...	1	...	...	...
6	Indian Midland (e) ...	...	...	...	...	...	11	3	...	4	2	...	...	...	4	...	...	...	...	...	...	...	...
7	North Western (f) ...	...	1	3	...	1	4	...	...	23	...	3	...	13	12	...	...	...	...	...	...	1	2
8	Oudh and Rohilkhand (g) ...	...	...	...	...	...	...	1	...	8	4	...	...	3	...	...	...	...	...	...	...	3	...
9	Wardha Coal ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>STATE PROVINCIAL.</b>																							
10	Eastern Bengal (h) ...	...	4	5	...	1	7	5	...	44	8	1	...	...	3	...	...	1	...	4	...	1	...
11	Railbati ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	Tirhoot ...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	Lucknow-Sitapur-Sihramau	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
14	Jorhat ...	...	...	...	...	...	8	...	...	...	...	...	...	...	1	...	1	3	...	1	...	...	...
15	Cherra-Companyganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	Burma (i) ...	...	1	...	...	...	4	...	...	3	1	...	...	...	1	...	...	1	...	...	...	...	...
<b>GUARANTEED COMPANIES.</b>																							
17	Madras ...	1	...	3	...	1	11	...	...	15	1	1	...	1	2	...	...	...	...	...	...	...	...
18	South Indian (j) ...	...	1	1	...	...	2	...	1	16	5	2	...	1	6	...	...	1	...	...	2	...	...
19	Great Indian Peninsula (k) ...	...	2	...	1	...	1	...	...	9	2	5	...	...	...	1	1	2	1	...	...	1	...
20	Bombay, Baroda, and Central India (l) ...	...	...	...	...	1	2	...	...	2	2	...	...	...	2	...	...	...	...	2	...	...	...
<b>ASSISTED COMPANIES.</b>																							
21	Darjeeling-Himalayan ...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	Deoghur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	Dibra-Sadiya ...	...	...	...	...	2	8	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
24	Bengal and North-Western	...	...	...	...	4	...	...	...	2	...	...	...	1	...	...	...	...	...	...	...	...	...
25	Rohilkhand-Kumaon (m) ...	...	...	...	...	1	...	...	...	3	...	...	...	1	...	...	...	...	...	...	...	...	...
26	Thabou-Duyinzak ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>FOREIGN.</b>																							
27	Pondicherry ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	West of Indian Portuguese	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>NATIVE STATES.</b>																							
29	H. H. the Nizam's Guaranteed (n) ...	...	...	2	...	...	1	...	...	9	...	...	...	2	...	...	...	...	...	1	...	...	...
30	H. H. the Gaekwar's ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	Bhavnagar-Gondal-Junagarh-Portbandar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
32	Morvi ...	...	...	...	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...
33	Jodhpore ...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...
<b>TOTAL</b>		1	9	22	1	18	77	12	3	229	43	14	...	20	45	1	3	21	2	29	...	9	2
{ Average for 5 corresponding previous quarters (p)		1	10	19	...	26	70	14	3	228	26	11	1	17	49	1	...	6	...	37	...	6	1

(a) Includes the Patna-Gya, Dildarnagar-Ghazipur and Tarakeswar Railways for three months; and the Sindia State Railway for two months.  
 (b) Includes H. H. the Gaekwar's Virangam-Mehsana-Vadnagar State Railway.  
 (c) Includes the Katni-Umaria Branch.  
 (d) Includes Bally-Kistna State Railway.

(e) Includes the Bhopal-Itarsi State Railway for three months; and the Sindia State Railway for one month.  
 (f) Includes the Amritsar-Pathankot and Ajpura-Dhatinda State Railways.  
 (g) Includes the Benares Branch.

No. 4.

First Quarter of 1889, distinguishing the different Classes of ACCIDENTS, the Number of PASSENGERS and OTHERS, and the KILLED or INJURED thereby.

32. Slips in cuttings or embankments.	23. Fire in trains.	34. Fire at stations, or involving injury to bridges or viaducts.	25. Other accidents.	Total all Classes.	NUMBERS OF PASSENGERS AND OTHERS.		NUMBERS OF SERVANTS.		TOTAL ALL CLASSES.		Mean miles of Railway open.	Number of Passengers carried.	Train mile- age of all descriptions.	Passenger mileage.	PER MILE OPEN.			TOTAL PASSENGERS.				Serial Number.	
					Killed.	Injured.	Killed.	Injured.	Killed.	Injured.					Number of passengers carried.	Train mileage of all descriptions.	Passenger mileage.	PER MILLION OF PASSENGERS.		PER MILLION OF PASSENGER MILES.			
																		Killed.	Injured.	Killed.	Injured.		
...	...	...	...	31	...	1(9)	...	3	...	4	1,650	4,008,177	2,180,442	268,100,045	2,428	1,321	162,436	...	...	...	...	1	
...	1	2	1	80	...	...	...	...	...	...	1,691	2,191,278	1,643,862	123,359,961	1,295	972	72,919	...	...	...	...	2	
...	...	...	...	24	...	...	...	...	...	...	286	229,227	175,062	7,255,122	801	612	25,345	...	...	...	...	3	
...	8	1	...	50	...	...	...	1	1	1	855	576,095	367,411	28,735,828	674	430	33,599	...	...	...	...	4	
...	...	...	...	9	...	...	...	...	...	...	174	157,140	46,963	5,605,293	903	270	32,214	...	...	...	...	5	
...	...	...	2	26	...	...	...	...	...	...	456	204,262	250,481	13,131,810	447	548	28,751	...	...	...	...	6	
...	8	...	2	75	1	4	...	1	1	5	2,386	2,425,755	1,779,114	137,311,658	1,017	746	57,549	0.412	1.649	0.007	0.029	7	
...	...	1	1	21	...	...	...	...	...	...	692	171,532	653,482	51,450,036	1,692	944	74,296	...	...	...	...	8	
...	...	...	...	...	...	...	...	...	...	...	45	37,020	24,166	1,011,594	823	537	22,480	...	...	...	...	9	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	2	4	3	98	...	...	...	1	...	1	798	2,081,435	681,635	69,853,774	2,608	854	87,536	...	...	...	...	10	
...	...	...	...	...	...	...	...	...	...	...	274	43,275	12,984	871,259	1,588	476	31,973	...	...	...	...	11	
...	...	...	...	1	...	...	...	...	...	...	273	539,245	143,382	19,788,543	1,975	525	72,485	...	...	...	...	12	
...	...	...	...	1	...	...	...	...	...	...	105	115,942	44,001	3,472,410	1,104	419	33,071	...	...	...	...	13	
...	...	...	...	14	...	...	...	...	...	...	304	13,484	4,482	130,131	442	114	4,267	...	...	...	...	14	
...	...	...	...	...	...	...	...	...	...	...	74	7,445	3,390	35,230	993	452	4,697	...	...	...	...	15	
...	...	...	1	12	...	...	...	...	...	...	392	1,211,924	364,726	38,128,024	3,092	930	97,265	...	...	...	...	16	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	40	...	1	47	...	...	...	...	...	...	839	2,023,790	570,018	78,793,800	2,412	679	93,914	...	...	...	...	17	
...	3	...	2	43	...	...	...	...	...	...	738	1,901,932	519,507	65,845,149	2,577	704	89,221	...	...	...	...	18	
...	32	2	1	61	...	3	...	...	...	3	1,446	2,471,677	2,579,414	126,337,384	1,708	1,783	87,325	...	1.214	...	0.024	19	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	1	23	35	...	1	...	1	...	2	461	2,611,362	569,972	68,260,023	5,665	1,236	148,069	...	0.383	...	0.015	20	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	...	...	2	...	...	...	...	...	...	51	8,875	35,112	223,987	174	688	4,392	...	...	...	...	21	
...	...	...	...	...	...	...	...	...	...	...	41	74,208	3,249	355,456	15,623	684	74,833	...	...	...	...	22	
...	...	...	...	11	...	...	...	...	...	...	78	23,585	28,188	191,765	302	361	2,459	...	...	...	...	23	
...	...	...	3	10	...	...	...	1	1	1	376	464,482	194,825	17,652,292	1,235	518	46,948	...	...	...	...	24	
...	...	...	1	6	...	...	...	...	...	...	91	58,697	21,376	1,772,403	645	235	19,477	...	...	...	...	25	
...	...	...	...	...	...	...	...	...	...	...	8	9,018	3,718	72,144	1,127	465	9,018	...	...	...	...	26	
Indian Rail way not fur nish ed.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	27	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	28	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	2	1	18	...	...	...	...	...	...	...	324	243,472	131,740	13,526,409	729	394	40,498	...	...	...	...	29	
...	...	...	...	...	...	...	...	...	...	...	58	66,320	16,853	1,358,515	1,128	287	23,144	...	...	...	...	30	
...	...	...	...	...	...	...	...	...	...	...	242	300,957	123,625	11,943,616	1,241	511	49,252	...	...	...	...	31	
...	...	...	...	5	...	...	...	...	...	...	68	36,155	18,594	1,280,767	532	273	18,835	...	...	...	...	32	
...	...	...	...	2	...	...	...	...	...	...	124	74,094	32,497	3,470,703	597	262	27,989	...	...	...	...	33	
2	64	15	42	679	1	(r)	9	2	8	3	17	14,792	25,381,866	13,224,461	1,159,325,131	1,716	894	78,375	0.039	0.315	0.001	0.007	...
1	57	8	46	637	1	18	2	9	3	27	12,815	20,631,888	11,782,492	974,884,383	1,626	919	76,074	0.048	0.364	0.001	0.018	...	

(A) Includes the Bengal Central Railway.

(4) Includes the Teungoo-Mandalay Extension.

(j) Includes the Villupuram-Dharmavaram State Railway, Nellore Branch, and Pondicherry Railway.

(k) Includes the Dhond-Manmad, Khamsan and Amritoli State Railways.

(l) Includes the Patri Branch.

(m) Excludes the Pondicherry Railway.

(n) Includes the Bareilly-Pilibhit State Railway.

(o) Includes the Bezwada Extension.

(p) Except where statistics for five quarters are not available for any line.

(q) Not a passenger, but a cartman.

(r) One was not a passenger. See Table No. III under East Indian.